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THE

MANAGEMENT OF THE SICK ROOM,

With Rules for Diet ;

COOKERY FOR THE SICK

AND CONVALESCENT ;

AND

THE TREATMENT OF THE

SUDDEN ILLNESSES AND VARIOUS ACCIDENTS

THAT REQUIRE PROMPT AND JUDICIOUS CARE.

COMPILED FROM THE LATEST MEDICAL AUTHORITIES,

BY A LADY OF NEW YORK,

UNDER THE APPROVAL AND RECOMMENDATION OF

CHARLES A. LEE, M.D.

EDITOR OF PARIS'S PHARMACOLOGIA, ETC.

—◆—
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I have examined the work entitled "Cookery for the Sick and the Convalescent," &c., and find it well adapted for the objects for which it has been prepared. There is certainly great need that the mass of the people should be enlightened on this subject, and aided in their humane efforts to contribute to the comfort and relief of the sick, by the preparation of suitable food and diet. The fact, that the work has been prepared by a lady of distinguished talent, judgment and taste, ensures its value, and guarantees the public confidence. The remarks on "the Management of the Sick Room," and "Diet during Disease," seem to me highly judicious; while the chapter on "Cookery for the Sick," so far as I have been initiated into the mysteries of the culinary art, is all that could be desired on this part of the subject. In short, I consider this treatise an excellent one, both in its design and execution; and as such, I trust it may be introduced into general circulation.

CHARLES A. LEE, M.D.

- 401 Hudson St. New York, Jan. 22, 1844.

P R E F A C E.

ONE of the chief difficulties which the physician encounters in the treatment of the sick, is the ignorance of nurses and attendants, in relation to the general management of the sick room and the preparation of suitable articles of drink and nourishment: although information on these subjects may be found in several medical works of eminence, yet as they are too expensive for popular use, and often couched in technical language, it becomes necessary in order to the general circulation of this kind of knowledge, that smaller and cheaper treatises should be published. To meet this object the present publication is issued.

In the chapters on "Cookery for the Sick and the Convalescent," and on "Diet during Diseases," the kind of food which is most beneficial for the patient during indisposition of various kinds, has been pointed out; as well as the best modes of preparing agreeable beverages and nourishing diet.

Under the head of "Management of the Sick Room," will be found numerous directions concerning the proper moral and physical treatment of the sick, which are of great importance. A due attention to them will often hasten the recovery of the patient and always promote his comfort.

The "Family Medical recipes" given, are all of them safe and efficacious, and will be found of service in allevi-

ating those ailments which are too slight to require medical aid. They also contain directions for the management of severer disorders when the advice of a physician cannot be procured, or before his presence can be obtained. They have all been subjected to the scrutiny and revision of an intelligent practising physician, and may therefore be confidently adopted.

The proper treatment of persons who have met with any of those casualties, to which we are daily subjected, has been explained in the chapter on "Accidents and Antidotes." And when we reflect that the life of an individual, who has met with a serious accident, is often determined by the knowledge and presence of mind of those around him, this chapter and that on the restoration of drowned persons, will be considered two of the most important which could be offered to the public generally.

The concluding chapters, containing general rules of practical utility for the preservation of health and life, the management of the digestive organs, &c. are well worthy of the attention of every one, who would preserve a sound mind in a sound body. The subjects address themselves not only to those who would recover, but to those who would retain the blessings of health.

The whole work has been prepared with care and under the advice and approval of one of the most distinguished and enlightened of our physicians. It is presented in the confident belief, that it is calculated to do good, and to supply a want, which has long been felt by those, who have had the care of invalids, or the management of large families.

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THE
MANAGEMENT OF THE SICK ROOM ;
COOKERY FOR THE SICK AND THE
CONVALESCENT, ETC.

CHAPTER I.

MANAGEMENT OF THE SICK ROOM.

THE sick should always be addressed in a gentle voice, and conversed with in the most cheerful manner. Their attendants should express sympathy for their sufferings, but endeavour to inspire them with courage and resignation in bearing them. To ridicule or make light of the pain of another is always unfeeling, and may often entail serious consequences, as the patient's recovery frequently depends upon the equanimity of his mind.

All unpleasant news should be entirely withheld from, or very *carefully* communicated to a person who is ill; he should be diverted, and kept as cheerful as possible, for recovery is hastened or protracted, more than the generality of nurses suppose, by the moral treatment which the patient receives.

As soon as the patient is convalescent, he may be read to; but such works must be chosen as afford interest without excitement, especially those which have a tendency to elevate the state of the mind, which, during a recovery from severe illness, is particularly impressible.

The chamber should be kept in perfect order, and free from noise and confusion. If the eyes of the patient are not weak the room should not be darkened, as the rays of the sun, especially of the morning sun, have a vivifying and renovating influence.

If the person has no appetite, he should not, in most cases, be tempted and coaxed to eat; and only very small quantities of food should be administered at a time.

The food for the sick should be prepared in the most delicate and careful manner; for as the senses are for the most part, during illness, particularly susceptible, the appetite may be entirely taken away, and nausea produced, by the least uncleanness, a smoky taste, or an offensive smell. The food should not only be delicate and well prepared, but it should be served in a neat and inviting manner.

Always spread a clean napkin over the bed-clothes and lay another upon the pillow, when you are administering food. Sponge the hands and lips of the patient as soon as he has done eating.

Wash every article the instant it is used, and do not keep the tables and mantle-piece filled with vials, pill-boxes, &c., for if they are within sight of the patient this practice will annoy him, besides, many of the vials may contain mixtures that render the air impure.

Every article of furniture should be kept in order, that the room may have an air of cheerfulness and comfort.

The room should be well supplied with water, towels, napkins, a slop-pail, two nice saucepans, a tea-kettle, a couple of bowls and tumblers, several cups, saucers, and wine glasses, several large and small spoons, and a foot-bath which should be kept in an adjoining closet.

All vials and papers of powders should be carefully labelled, as one medicine may be mistaken for another, and sometimes poison be administered by neglect of this caution. The instant a bottle is empty cleanse it thoroughly with warm water; throw away pill boxes after their contents have been used. Do not give them to children as play-things, as they are generally impregnated with the medicine they have contained, and may do injury.

Pure air contributes not only to the preservation, but to the restoration of health. A sick chamber should be ventilated at least twice a day. The process of ventilation should be as short as possible, the patient must be

well covered, and even his head kept beneath the bed-clothes if he experiences the slightest sensation of chillness.

The bed-clothing should be changed twice a week *at least*; the bed must be made every day, and if the patient can bear it, twice a day. The bed-clothes should be carried into another room and aired before they are replaced upon the bed, as all exhalations from the body during sickness are particularly deleterious, if reabsorbed.

The person of the patient should be kept perfectly clean, and his garments frequently changed. Daily ablutions of the whole person with warm water are very serviceable. The mouth should be often rinsed and swabbed with a fine linen rag, kept for that purpose, and the teeth kept perfectly clean.

When a sick person is raised up to take food he should always be covered with a blanket or shawl, and never leave the bed for an instant without additional covering.

When a physician is in attendance he should be consulted concerning the best place of purchasing medicines, (if in a city,) and the medicine should be shown to him before they are used for fear that they may be adulterated, or of an improper kind.

Describe to the physician the patient's minutest symptoms—use no deception in communicating either his mental or his bodily state.

Pay strict attention to the physician's directions, if they are numerous *note* them down, and obey them *strictly*. Even a trivial deviation from his orders may be attended with unpleasant consequences.

The person who has charge of the sick should possess a quiet and even temper, be naturally cheerful, very patient, and disposed to bear with the most unreasonable fretfulness and irascibility.

Do not reprove or attempt to argue, with a person who is very ill; he can hardly be considered a responsible being, for the mind is not generally in a healthy state when the body is disordered. If you are forced to oppose his wishes, do so gently, but without reproaching or rebuking him, as you should carefully avoid all causes of excitement.

The dressing of a blister is a very simple process, but not generally understood. Lay the blister bare, wash it very gently with a fine linen rag, dipped in warm water; place another piece of linen several times doubled below the blister, and then with a needle, or very sharp scissors, puncture the *lower* part of the little bags of water, breaking the skin as little as possible. Melt together a little fine beeswax and tallow—spread them on a piece of linen and apply them to the blister. Blisters should be dressed twice or three times a day, and each time a fresh salve of beeswax and tallow should be used.

The practice of burning pastiles, brown paper, &c. in a sick room is an injurious one, and does not, as is supposed, purify the air. Frequent ventilation is the best mode of preserving the air pure, and should be resorted to freely.

CHAPTER II.

DIET DURING DISEASES.

General Diet.—Most persons not acquainted with physiology, imagine that the flesh of young animals, or of birds, is more *delicate* than that of grown sheep and oxen; and will hence recommend an invalid or convalescent, with his digestive powers enfeebled, to “try a bit of boiled veal, or a chicken, or a rabbit, or, perhaps, advise a little soup or jelly, &c.” Now, it is certain that, in ninety-nine cases out of a hundred, a slice of boiled leg of mutton, or a broiled mutton chop, would be infinitely preferable to any or all of these, as being more digestible. The term *delicate* is totally inappropriate to food of any kind: if it be used instead of *tender*, then all meat advanced a stage towards putrefaction is more tender than when quite fresh, and is really more wholesome. If by “delicate,” *digestible* is meant,—that is, the food which

is soonest converted into chyle, and assimilates to the corporeal substance of the eater, then a mutton chop and bread will prove a more delicate breakfast than buttered toast, muffins, hot rolls, and chocolate.

A pudding for an invalid should be boiled tender in milk, and of a good thickness, so that the eggs may just set it, and give it firmness enough to stand without breaking, when turned out of the mould. The pudding cannot be made too delicate: it should be well baked for about an hour, or more, according to the size; and it should never be taken from the oven until within two or three minutes before wanted.

Febrile and Inflammatory Diseases.—In these prevailing affections, the functions of the digestive organs are greatly enfeebled, and the ordinary solid alimentary matters, such as meat, potatoes, butter, &c., are very imperfectly digested, and frequently remain for a long period in the stomach, little changed. It is therefore essential that such substances be avoided; for their presence in the system will increase the heat of the body, and quicken the breathing. Farinaceous and amylaceous or starchy aliments, which are readily digested and produce little increase of heat during their assimilation, have been found the best adapted for these affections; to which, in certain cases complicated with debility, or in weak individuals, beef-tea, deprived of fatty matter, may be added.

Acid alimentary drinks, made from various fruits, are frequently exhibited, as they are very agreeable and refreshing; but it is a safe practice to allow them in a very diluted state, as they are apt to run into fermentation, causing irritation in the bowels, and sometimes diarrhœa. Tea or coffee is adapted for the whole of this class; only, however, at the regular hours of diet. Pure water, soda water, water very slightly acidulated with any of the mineral acids, or with pure tartaric or citric acid, constitute the best drinks for patients labouring under these affections. During the cold and sweating stages of fevers, &c., the drinks should be warm.

Apoplexy and Affections of the Head.—There is an intimate sympathetic connection between the digestive organs and the brain; hence whatever excites or deranges the functions of the first, will re-act upon the second. In every affection of the brain, therefore, the food ought to be light and easy of digestion, and not liable to stimulate either the circulation of the blood or the nervous system. When the disease is of an acute character, the food should consist of small quantities of the various amylaceous or farinaceous substances, with tea or coffee; if it be of a chronic nature, or if there be simply a determination of blood to the head, the limitation in point of quantity need not be so great; but animal food, wines, spirits, &c., ought to be avoided.

Diseases of the Heart and Rheumatism.—Acute rheumatism is often complicated with disease of the heart; giving origin to an intractable and sometimes fatal affection of this organ. The treatment of rheumatism ought therefore to be conducted on the most antiphlogistic principles. Animal food of all kinds should be avoided, as tending to increase the quantity of blood in the body and to promote the growth of muscular organs, such as the heart. Arrow-root, sago, or other amylaceous substances, with tea or coffee, constitute the most appropriate diet during the acute stage of the disease. Chronic affections of the heart are frequently complicated with indigestion to a greater or less extent, which often aggravates the distressing symptoms, and may increase the organic alterations going on in its structure. In general, the rules laid down for the treatment of deranged digestion will apply; but if an enlargement of the heart be the disease, animal food, and wines or spirits, ought to be used in small proportions; and in some cases altogether avoided.

Pulmonary Consumption.—The dietetic treatment of this disease must be varied according to its stage or progress of advancement. In the primary stages, if there be no derangement of the digestive organs, light farinaceous

substances, with a proper proportion of animal meat, may be allowed. Fish, milk, eggs, &c., may be occasionally substituted for the meat. Asses' milk, as containing a small proportion of butter and curd and much sugar, is, with justice, esteemed a favourite aliment for consumptive persons; being light and easily digested. When any tendency to pleurisy is evinced by a sharp pain in the chest, and other signs, solid animal food ought to be omitted, until this is removed. In the latter stages the diet may be nourishing, and may contain an average allowance of animal food; but great care should be taken not to overload the stomach, so as to excite indigestion or quicken the breathing. Diarrhœa is very apt to occur at the later periods of the disease; on this account fruits and green vegetables should be sparingly used; for if once excited, it is always difficult to cure, and frequently can only be alleviated.

Diarrhœa, Dysentery, Cholera.—In these affections the stomach and bowels are in a state of high irritation, and their functions of assimilation are more or less impaired. Articles of diet, which, during health, are digested with ease, produce in such diseases great distress and aggravation of the symptoms. It is fortunate that nature has provided a check to any improper indulgence; for, in extreme cases, nausea or vomiting is a common accompaniment, and, in almost all, there is a disrelish for food. Tea or coffee, with bread thoroughly toasted, arrow-root, isinglass-jelly, containing only aromatics and a small portion of sugar or milk diluted with water, may be used as diet in these affections. The drinks may be included in the following list, namely, toast water, soda water, pure water, and occasionally infusion of mace (mace tea), where there is nausea or vomiting.

Constipation.—It is a common and correct opinion that, when the bowels are slow in their action, it is better to effect the desirable change by means of diet than medicine. Attention to diet alone sometimes fails in effecting

this ; but among healthy individuals, when accompanied with sufficient exercise, pure air, and regularity of life, there are few instances of its inefficiency. When the digestive organs are healthy, the use of fruits, green vegetables, potatoes, barley, or oatmeal *porridge*, soups, along with the other ordinary alimentary substances, will generally, when accompanied with the other circumstances mentioned, produce a regular action of the bowels. But if the functions of the stomach be deranged, and green vegetables, soups, &c., be excluded from the alimentary list, then it is productive of less discomfort, and is less injurious to the system, to employ gentle laxatives.

Urinary Diseases.—These constitute a class of diseases in which diet plays a conspicuous part in their cure or aggravation, and which sometimes require considerable nicety in their discrimination.

Diabetes.—In this disease the functions of the stomach are so changed, that the larger proportion of vegetable substances, in place of being digested, are more or less converted into sugar. This is only the case, to a limited extent, with many animal substances ; hence the latter have been found most advantageous in the treatment of this affection. The larger portion of the diet may consist of beef, mutton, bacon, or indeed of the flesh of any other alimentary quadruped or bird, eggs, and milk ; but as vegetable substances are also necessary, bread, rice, sago, arrow-root, &c., ought to be preferred. Pure water, in small quantities, is the best of all diluents, and when tepid the temperature is a check upon its indulgence to excess. The urine is very characteristic of the disease, being sweet, of a greenish-yellow colour and peculiar odour, of great density, and readily fermenting with yeast.

Oxalic Acid in the Urine.—It is often difficult to discover this affection, which is generally considered not common ; although Dr. Bird, in a recent paper on the subject, has formed a different opinion. According to Dr

Prout, the urine is generally transparent, very free from sediment, of a pale citron-yellow or greenish colour, and generally of moderate specific gravity, except when increased in quantity, when its density is less. According to Dr. Bird's recent researches, the urine is always acid, has often an amber hue, and octohedral crystals are detected in it by the aid of the microscope. There are also generally present some of the prominent symptoms of dyspepsia; such as flatulence, irregular action of the heart, intermission of the pulse, craving for food, which is not disposed of so rapidly as in diabetes, although more quickly than in some other forms of dyspepsia. When there is stone in the kidneys or bladder, discharge of blood sometimes take place; and in such cases the nature of the affection is more easily ascertained. Sugar, and substances containing saccharine matter, are generally considered improper articles of diet in this disease, as liable to generate oxalic acid; and for a similar reason those vegetable substances which contain it, such as sorrel, stems of the alimentary rhubarb, &c. Tender animal food, fish, along with bread, rice, sago, arrow-root, &c., should be chiefly employed. Pure water is the best drink, and it ought to contain no lime in its composition; for this might tend to produce the oxalate of lime calculus. Dr. Prout recommends, in some of these affections, as well as in some cases of diabetes, good porter, or sound and dry wine. When the urine contains urea in excess, a diet similar to the above may be employed.

Insidid Diabetes, or Hydruria.—This disease is generally characterised by a copious secretion of watery urine, and instances of its irregular occurrence may sometimes be observed in hysteria. It is often a very obstinate affection, and like saccharine diabetes, resists many varieties of treatment. The specific gravity of the urine is frequently very low, and Dr. Prout ranges it from 1001 to 1010. There is generally a deficiency of urea in the urine of such patients, and it often differs little in appearance from common water. The diet best adapted for

such cases should consist of a considerable proportion of tender animal substances, with a moderate allowance of bread or other farinaceous aliments. As a general rule, the dietetic treatment ought to be similar to that recommended in saccharine diabetes; but the proportion of animal food need not be so great.

Disease of Kidneys with Dropsy.—Although much has been done of late years, to elucidate the nature and treatment of these affections, they are still not thoroughly investigated as to their chemical pathology; but as a general rule, the urine is albuminous, and this, along with some of its other qualities, constitute the most valuable signs we possess of granular disease of the kidneys. In the advanced stages of these affections, there are generally some obstinate dyspeptic symptoms present; the rules, therefore, which have been given under the article Indigestion will apply to such cases.

In the incipient stages, if no acute inflammation be present, a moderate proportion of animal food, along with the various farinaceous substances, may be allowed, to which may be added some of the more tender green vegetables, if they do not produce indigestion. But in the latter stages, when dropsical swellings are obstinate, and complicated with diarrhœa, or other serious derangement of the digestive organs, the greatest attention to diet should be given. Tender animal substances, fish, bread, rice, and the various amylaceous products, may be employed, along with a moderate allowance of sound sherry, diluted with water. In some cases, a tea-spoonful of brandy, or gin, largely diluted with water, will be found to agree better with the digestive organs than wine; but in general, neither is proper.

Lithic Acid Sediments, Gravel in the Urine.—The lithic acid deposits in the urine are found in the form of amorphous sediments or concretions, and assume three different modifications of colour, namely, yellow, red, and pink; and in such cases the urine is generally acid. The

yellow amorphous sediment is often deposited after irregularities in diet, and the urine does not in general differ much from that in health. The red or lateritious generally indicates a febrile state of the system; while the pink is very frequently associated with some organic disease.

The amorphous sediments are in general symptomatic of some other disease, which consequently requires its own appropriate dietetic treatment; while the chrystalised or massive concretions, indicate great derangement of the urinary organs themselves. When the amorphous sediments are only occasional and small in quantity, no deep-seated or permanent disease is indicated by them; but if deposited in large quantities and pretty constantly, more especially if white or pinkish in colour, some organic or serious disease may be apprehended. Dr. Prout remarks that the pink sediment is rather rare, and generally indicates the presence of chronic visceral affections. I have remarked it in affections of the liver, and in several instances of dropsy from enlargement or other disease of the heart. The rules which have been given respecting the treatment of deranged digestion, should here be strictly observed, not only in regard to quality but also quantity; for an excess of food, even of the most digestible kind, may cause the deposition of lithic acid from the urine. In general, a moderate proportion of animal and farinaceous substances may be employed, along with the usual alimentary liquids, tea or coffee. Wine or ardent spirits are in general injurious except in very moderate quantities; and when taken to excess often cause great aggravation of the complaint. Fatty substances, malt liquors, milk, fruits, green vegetables, acescent and sweet wines, and hard water, ought to be avoided.

Phosphatic Deposites in the Urine.—In this affection, the deposition consists very frequently of the mixed phosphates, or of the phosphate of magnesia and ammonia and the phosphate of lime. The disease is sometimes of a general character, but more frequently it is associated with disease of the bladder or prostate gland. The urine and

deposits vary in appearance, according to the predominance of the one or the other salt. When the triple phosphate is most abundant the deposit is more or less crystallised; but when the phosphate of lime predominates, it is found in the form of a whitish or yellowish-white powder; or sometimes containing crystalline granules, when the coats of the bladder have become diseased. The urine is generally of a pale colour, frequently alkaline when newly passed, and more abundant than natural. When the secretion is very great, little or no deposit takes place without the application of heat; but when moderate, its formation often takes place in the bladder, and the urine is muddy when passed. Dr. Prout remarks that some authors, from chemical hypothesis, have recommended a vegetable diet in this disease, or one as free from nitrogen as possible, in order to correct the alkalinity of the urine. Experience, however, has shown that vegetable aliments alone are not calculated to support the system sufficiently under this formidable affection. A mixture of animal and farinaceous diet is best calculated to support the vital powers, and in general it agrees better with the digestive organs than one composed of the ordinary dietetic vegetables. A portion of wine is often beneficial, and Dr. Prout recommends Moselle or Bucellas, as well as sound cider and perry; and he considers that liquids containing malic acid are sometimes very beneficial in arresting the deposition of the phosphates.

Corpulency.—When all the functions of the body are properly balanced, very little fatty matter is deposited in the system; although a certain amount of this is by no means incompatible with what is denominated ordinary health. In persons of common size and vigour, the proportion of fat has been computed to average from one-tenth of one-fifteenth of the weight of the body; but in extreme cases of obesity, this has amounted to about four-fifths, as in the case of Mr. Lambert, of England. When the accumulation of this principle becomes excessive, derangement of the secondary assimilation is going on,

which is often the premonitor of some serious disease. The same holds true with extreme leanness, which generally indicates some defect in the primary or secondary processes of digestion. A large majority of these instances of extreme obesity are owing to over-feeding, combined with indolence, or indulgence in the use of fermented liquors; but it is also true that a certain proportion of persons become fat, where excess of no kind is practised. In general, however, it will be found, that in such cases a due proportion of exercise has not been taken. The rules, therefore, to be observed for the removal of obesity, may be deduced from these principles. The aliment should consist of the various vegetable substances usually employed, and fish, with only a small amount of animal food or animal preparation, and little fatty or oily matter should be used. Fermented liquors and ardent spirits ought to be avoided; for experience proves that the large proportion of carbon they contain is readily converted into fatty matter; and this view is supported by the latest and most enlightened theory of secondary assimilation. By great abstinence and severe exercise, conjoined with copious sweats, the flesh may be rapidly reduced to the desired standard.

Quantity is also an important element in the diet of such persons, and this, in an individual of ordinary weight, should not exceed twenty-eight or thirty ounces daily. Exercise of an active kind is also necessary, and it ought to be continued for at least two or three hours every day, and of all the varieties in common use, walking is the best. Indeed, so important is smart or laborious exercise, if continued a sufficient length of time, that it is rare to meet with a corpulent person of such habits or occupation. Much sleep also favours obesity, on the same principle as indolence; for less carbon is consumed by the lungs, skin, &c. during that period, from the comparative inactivity of the functions connected with these organs. The amount of sleep should therefore be restricted considerably within the ordinary limits.

Dr. Prout is of opinion that the production of gall-

stones is owing to a derangement of the oleaginous or fatty assimilation, and recommends a similar diet and regimen for the prevention of future attacks of this painful and sometimes formidable affection ; but as this disease is often accompanied with weakness of the digestive organs, the vegetable part of the diet ought to consist chiefly of the farinaceous kinds.

Worms.—Indigestion, in some form, almost uniformly accompanies the existence of worms in the intestines ; and from this fact may be deduced the inference, that their generation and growth are promoted by the presence of acid and imperfectly digested matters. The diet ought therefore to be conducted on the same principles as in the treatment of indigestion. Green vegetables, fruits, oatmeal, and all acescent substances, should be avoided. The diet may consist of bread, rice, the finest quality of pease-meal, sago, with a proper allowance of animal food, including milk and eggs.

Cutaneous Diseases.—There are many chronic diseases of the skin that seem to be little under the influence of diet ; but those of an acute or inflammatory kind are often increased, if not sometimes produced, by an indulgence in animal food, fermented liquors, ardent spirits, green vegetables, salt fish, and meat of any description that has been long preserved. As a general rule, all substances difficult of digestion should be avoided ; and if indigestion co-exist with the disease, this must be carefully attended to as an important step in the cure. There is one affection closely allied to skin diseases, which may be specially noticed, as often accompanied with derangement of the assimilating functions, namely, *furunculi*, or boils. In young persons, the habit is sometimes rather full during the presence of this affection ; but although this shows that the blood is sufficiently supplied with nutriment, it will, in many cases, be found that some irritating principle is generated in the digestive organs. This, however, is more apparent when the disease occurs in old individuals,

or in persons of a cachectic or broken-down constitution; the functions of their digestive organs ought therefore to be carefully regulated. A moderate allowance of animal food, with bread and other easily-digested farinaceous substances, will be found beneficial; to which may sometimes be added, with great advantage, one or two glasses of sound wine daily.

Suppurating Wounds and Ulcers.—In some wounds and ulcers, the discharge of matter is very copious, and the system consequently becomes much exhausted. It has therefore been found that a generous diet, containing a considerable proportion of animal matter, is most beneficial. This plan is however sometimes pushed far beyond the powers of the digestive organs, particularly in point of quantity; in consequence of which, indigestion and an unhealthy state of the diseased parts are produced. The limits of healthy assimilation should therefore never be exceeded; and when a large amount of stimulating nutriment is required, wine or malt liquors should form a portion of the aliment. In cases of ordinary wounds and ulcers, provided the general health be good, no particular deviation from the common diet is in general required; but if accompanied with derangement of the digestive organs, modifications of it, adapted to this state, ought to be employed.

Accidents, Fractures, &c.—In healthy individuals of regular habits, the dietetic treatment should be conducted on the same principles as in inflammatory diseases; at least for some time after receiving a serious injury. Farinaceous substances, arrow-root, sago, &c., tea or coffee, may be allowed; and in many cases beef-tea is productive of no injurious excitement. The treatment, however, requires to be much more stimulating in persons of intemperate habits; and inattention to the important difference of constitution between regular and irregular individuals, sometimes induces *delirium tremens*. In such cases a certain proportion of wine or spirits must be allowed, according to the previous habits of the patient, accompanied

with a moderate quantity of tender, easily-digested animal food, and farinaceous substances.

Diet after Child-birth.—Nurses and old women very frequently entertain false notions upon this subject, and those who are under their management sometimes suffer severely by reason of a misplaced confidence in the doctrines of these sage individuals. After child-birth, in a considerable number of cases, there is a feverish or excitable state of the system for some days; which, by indiscretion in diet, or exposure to cold, might readily assume an inflammatory character; a state well known to be highly dangerous to the patient. It is therefore obvious that a generous diet and stimulating drinks ought not to be hazarded; for though the mother may be considered weak, and though nourishment may be thought necessary for other reasons, these trifling advantages are completely overbalanced by the risks which attend their employment. For the first four or five days, the diet should consist of tea or coffee, milk, bread, panado, arrow-root, sago, rice, or tapioca. After that period beef-tea or chicken-soup may be added; but no solid animal food should be taken, until a week of the confinement has elapsed. Chicken, beef-steak, or mutton-chop, and eggs, may then be allowed to a moderate amount. Alcoholic drinks should never be taken, except when recommended by the attending physician.

Indigestion.—See page 96.

CHAPTER III.

COOKERY FOR THE SICK AND THE CONVALESCENT.

It is of more consequence to support those whose bad appetite will not allow them to take the necessary nourishment, than to stimulate the appetites of persons in health.

It may be unnecessary to advise that a choice be made of the things most likely to agree with the patient ; that a change be provided ; that some one article of food be always ready ; and that not too much be made at once of any preparation which is not likely to keep, as invalids require variety.

A Clear Broth that will keep Good for a long Time.—Put a pound of beef, a knuckle-bone of veal, and a few shanks of mutton, into a deep pan, and cover it close with a dish ; bake or boil until the meat is done enough for eating, with only as much water as will cover it. When the broth is cold, cover it close in a cool place. When it is used, give it what flavour the patient likes best. Generally salt alone should be used.

A Quick-made Broth.—Take part of a neck or loin of mutton, take off the fat and skin, beat the meat, cut it in thin slips, set it on the fire in a small covered tin saucepan, with three-quarters of a pint of water, put in a bit of thyme and parsley, and, if approved, a slice of onion. Let it boil very quick ; skim it nicely ; take off the cover, if likely to be too weak ; else cover it. Half an hour is sufficient for the whole process.

A very supporting Broth against any kind of Weakness.—Boil two pounds of loin of mutton, with a very large handful of celery or an onion, in two quarts of water to one. Take off part of the fat. Any other herbs or roots may be added. Take half a pint three or four times a day.

A very nourishing and palatable Veal Broth.---Put the knuckle of a leg or shoulder of veal, with very little meat to it, a full-grown fowl, and three or four shank-bones of mutton extremely well soaked and bruised, with an onion, a large bit of bread, and three quarts of water, into a stewpot that covers close, and simmer them in the slowest manner after the broth has boiled up and been skimmed; strain, and take off the fat. Salt it as wanted. It will require four hours. Veal makes an excellent broth for the convalescent.

Dr. Radcliffe's Restorative Pork Jelly.---Take a leg of well-fed pork, just as cut up; beat it and break the bone. Set it over a gentle fire with three gallons of water, and simmer to one. Add half an ounce of mace and the same of nutmegs. Strain the jelly through a fine sieve. When cold take off the fat. Give a breakfast-cup full the first thing in the morning, last thing at night, and at noon, adding salt to your taste. This jelly is only used by the convalescent.

Shank Jelly.---Soak twelve shanks of mutton four hours, then scour them very clean. Lay them in a saucepan with an onion, twenty Jamaica or forty black peppers, a bunch of sweet herbs, and a crust of bread made very brown by toasting. Pour three quarts of water over them, and set them upon a hot hearth closely covered; let them simmer as gently as possible for five hours, then strain the jelly, and put it in a cold place.

This may have the addition of a pound of beef, if approved, for flavour. It is a remarkably good nourishment for people who are weak.

Broth of Beef, Mutton, and Veal.---Put two pounds of lean beef, one pound of scrag of veal, one pound of scrag of mutton, and a few sweet herbs, into a nice tin saucepan, with five quarts of water; simmer to three quarts, and clear from the fat when the broth is cold. Add one onion, if approved.

Soup and broth made of different meats are more supporting, as well as better flavoured.

To remove the fat, take it off when cold as clean as possible; and if there be still any remaining, lay a bit of clean blotting or cap paper on the broth when in the basin, and it will take up every particle.

Calf's Feet Broth.---Boil two calf's feet in three quarts of water to half; strain and set it by; when it is to be used, take off the fat, put a large tea-cupful of the jelly into a saucepan over the fire, with half a glass of sweet wine, a little sugar and nutmeg, and beat it up till it be ready to boil; then take a little of it and beat it by degrees with the yolk of an egg, and adding a bit of butter the size of a nutmeg, stir all together, but do not let the mixture boil. Grate a piece of fresh lemon-peel into it.

Another.---Boil two calf's-feet, two ounces of veal, and two of beef, the crust of a penny-loaf, two or three blades of mace, half of a nutmeg sliced, and a little salt, in three quarts of water, until only three pints are left; strain and take off the fat.

Chicken Broth.---Put the body and legs of the fowl that chicken panada was made of, after taking off the skin and rump, into the water it was boiled in, with one slice of onion. Simmer till the broth be of a pleasant flavour. If there is not water enough, add a little. Beat a quarter of an ounce of sweet almonds with a tea-spoonful of water, boil them in the broth, strain, and, when cold, remove the fat.

Eel Broth.---Clean half a pound of small eels, and set them on the fire with three pints of water, some parsley, one slice of onion, a few peppercorns; let them simmer till the eels are broken, and the broth good. Add salt, and strain off the broth.

The above should make three half pints of broth.

Arrow-Root Broth.—Of this beware of having the wrong sort, for it has been counterfeited with bad effect. If genuine, it is very nourishing, especially for weak bowels. Put into a saucepan half a pint of water ; a glass of sherry, or a spoonful of brandy, if spirits are allowed, if not use lemon-juice, a little grated nutmeg, and fine sugar ; boil up once, then mix it by degrees into a dessert-spoonful of arrow-root, previously rubbed smooth with two spoonfuls of cold water ; then return the whole into the saucepan ; stir and boil it three minutes.

Tapioca Jelly.—Choose the largest sort of tapioca, pour cold water on to wash it two or three times, then soak it in fresh water five or six hours, and simmer it in the same until it becomes quite clear ; then add lemon-juice, wine, and sugar. The peel should have been boiled in it. The tapioca thickens very much.

Gloucester Jelly.—Take rice, sago, pearl-barley, harts-horn shavings, and eringo-root, each an ounce ; simmer with three pints of water to one, and strain it. When cold it will be a jelly ; of which give, dissolved in wine, milk, or broth, in change with other nourishment.

Panada, made in five minutes.—Set a little water on the fire with a glass of white wine, some sugar, and a scrap of nutmeg and lemon-peel : meanwhile grate some crumbs of bread. The moment the mixture boils up, keeping it still on the fire, put the crumbs in, and let it boil as fast as it can. When of a proper thickness just to drink, take it off.

Another.—Make as above, but, instead of a glass of wine, put in a tea-spoonful of rum, and a bit of butter ; sugar as above. This is a most pleasant mess.

Another.—Put to the water a bit of lemon-peel, mix the crumbs in, and, when nearly boiled enough, put some lemon or orange syrup. Observe to boil all the ingre-

dients, for, if any be added after, the panada will break and not jelly.

Bread Jelly.—Take a penny-roll, pare off the crust, and cut the crumb into thin slices; toast them on both sides of a light pale brown. Put them into a quart of spring water, let it simmer gently over the fire until the liquid becomes a jelly, strain it through a thin cloth, and flavour it with a little lemon-juice and sugar, added when hot. If wine be permitted, it is an improvement. This jelly is of so strengthening a nature, that one tea-spoonful affords more nourishment than a tea-cupful of any other. It may be prepared without the lemon-juice and sugar, and a tea-spoonful put into every liquid the patient takes, such as tea, coffee, broth, &c.

A Restorative Jelly.—Take one ounce of rice, the same quantity of sago, pearl-barley, hartshorn-shavings, and eringo-root, put them into three pints of water, and let it simmer till reduced to one pint; then strain it off, and, when cold, put in a little wine or milk.

Farinaceous Jelly.—Take of tapioca, whole rice, pearl-barley, and sago, of each two ounces; boil them in two quarts of water over a slow fire, stir while boiling, strain it through a sieve, and flavour it with sugar, lemon, or orange juice.

Chicken Panada.—Boil a chicken till quite done in a quart of water; take off the skin, cut the white meat off when cold, and put into a marble mortar: pound it to a paste with a little of the water it was boiled in, season with a little salt, a grate of nutmeg, and the least bit of a lemon-peel. Boil gently for a few minutes to the consistency you like: it should be such as you can drink, though tolerably thick.

This conveys great nourishment in small compass.

Sippets, when the Stomach will not receive Meat.—On an extremely hot plate put two or three slices of stale

bread, and pour over them some gravy from beef, mutton, or veal, with which no butter has been mixed. Sprinkle a little salt over them.

Eggs.—An egg broken into a cup of tea, or beaten and mixed with a basin of milk, makes a breakfast more supporting than tea solely.

An egg divided, and the yolk and white beaten separately, then mixed with a glass of wine, will afford two very wholesome draughts, and prove lighter than when taken together.

Eggs very little boiled, or poached, taken in small quantity, convey much nourishment; the yolk only, when dressed, should be eaten by invalids.

A Great Restorative.—Bake two calf's-feet in two pints of water and the same quantity of new milk, in a jar, close-covered, three hours and a half. When cold, remove the fat.

Give a large tea-cupful the first and last thing. Whatever flavour is approved, give it by baking in it lemon-peel, cinnamon, or mace. Add sugar after.

Another.—Simmer six sheep's-trotters, two blades of mace, a little cinnamon, lemon-peel, a few hartshorn shavings, and a little isinglass, in two quarts of water, to one; when cold, take off the fat, and give near half a pint twice a-day, warming with it a little new milk.

Another.—Boil one ounce of isinglass shavings and a bit of brown crust of bread, in a quart of water, to a pint, and strain it.

This makes a pleasant jelly to keep in the house; of which a large spoonful may be taken in wine and water, milk, tea, soup, or any other way.

Caudle.—Make a very fine smooth gruel of half grits; using water enough to make the gruel quite thin, strain it when boiled well; stir it all the time till cold. When it is used, add sugar, wine, and lemon-peel, with nutmeg.

Some like a spoonful of brandy besides the wine; others like lemon-juice.

Another.—Boil up half a pint of fine gruel, with sufficient water to make the gruel thin, and a bit of butter the size of a large nutmeg, a large spoonful of brandy, the same of white wine, one of capillaire, a bit of lemon-peel, and nutmeg.

Another.—Into a pint of fine gruel, made as above, put, while it is boiling-hot, the yolk of an egg beaten with sugar, and mixed with a large spoonful of cold water, a glass of wine, and half a nutmeg. Mix by degrees. This is very agreeable and nourishing food. Some like gruel, with a glass of table-beer, sugar, &c., with or without a tea-spoonful of brandy.

Cold Caudle.—Boil a quart of spring-water; when cold add the yolk of an egg, the juice of a small lemon, six spoonfuls of sweet wine, sugar to your taste, and syrup of lemon one ounce.

A Flour Caudle.—Into five large spoonfuls of the purest water rub smooth one dessert-spoonful of fine flour. Set over the fire five spoonfuls of new milk, and put two bits of sugar into it: the moment it boils, pour into it the flour and water, and stir it over a slow fire twenty minutes. It is a nourishing and gently astringent food. This is an excellent food for babies who have weak bowels.

Rice Caudle.—Boil a quart of water and pour into it a tea-cupful of ground rice mixed with a little cold water; when of a proper consistence, add sugar, lemon-peel, and cinnamon, and a glass of brandy to a quart. Boil all smooth.

Another.—Soak some rice in water an hour, strain it, and put two spoonfuls of the rice into a pint and a quarter of milk; simmer till it will pulp through a sieve, then put the pulp and milk into the saucepan, with a bruised clove and a bit of white sugar. Simmer them ten minutes: if too thick, add a spoonful or two of milk; and serve with thin toast.

Milk Porridge.—Boil a tea-cupful of half-grits, in three pints of water, for an hour and a half; strain the water off, and add cold milk, or warm as may be approved.

French Milk Porridge.—Stir a handful of oatmeal into a quart of water, let it stand to be clear, and pour off the latter; pour a pint of fresh water upon it, stir it well, let it stand till next day; strain through a fine sieve, and boil the water until half has been boiled away, then add a pint of milk and boil again. This is much ordered, with toast, for the breakfast of weak persons abroad.

Ground Rice Milk.—Boil one spoonful of ground rice, rubbed down smooth, with three half pints of milk, a bit of cinnamon, lemon-peel, and nutmeg. Sweeten when nearly done.

Sago.—To prevent the earthy taste, soak three table-spoonfuls in cold water an hour, pour that off, and wash it well; then add a pint of water and simmer it gently till the globules are clear, with lemon-peel if approved. Add wine and sugar, and boil all up together.

Water Gruel.—Put a large spoonful of oatmeal by degrees into a pint of water, stir it until it is smooth, and then boil it.

Another Way.—Rub smooth a large spoonful of oatmeal with two of water, and pour it into a pint of water boiling on the fire; stir it well and boil it quick, but take care it does not boil over. In a quarter of an hour strain it off, and add salt and a bit of butter when eaten. Stir until the butter be incorporated.

Barley Gruel.—Wash four ounces of pearl-barley; boil it in two quarts of water with a stick of cinnamon, till reduced to a quart; strain and return it into the saucepan with sugar and three-quarters of a pint of port wine. Heat it and use it as wanted.

Buttermilk with Bread or Without.—It is most wholesome when sour, for then it is less likely to be heavy; but

patients generally think it more palatable when it is made of sweet cream. Pour the buttermilk over a couple of slices of bread and let them soak ten minutes.

Baked Fruits.—Apples baked in an oven, or roasted before the fire, with a small quantity of good brown sugar surrounding them, make an excellent meal for invalids. Pears are equally good, but they should be baked with sugar-house molasses. Raisins also may be boiled until they swell, and then baked with soda or other biscuits, that have been crumbled and steeped in water. Sweeten them with a few tea-spoonfuls of sugar. The raisins are sometimes baked with light stale sponge cake which has been immersed in water. The pans in which the raisins are baked should be well buttered.

Biscuit Jelly.—Biscuit jelly is particularly serviceable in cases of debility of the digestive organs. Boil a quarter of a pound of soda or sea biscuits in as much water as will cover them. When they have boiled to a jelly strain them through a fine sieve or jelly-bag, sweeten them with powdered sugar according to your taste, and add a wine glass of port wine and ten drops of cinnamon water.

Hartshorn Jelly.—Boil a quarter of a pound of hartshorn shavings in a quart of water. Stir it that it may not burn. When so much of the water has evaporated that the jelly begins to thicken, strain it, add the juice of half a large orange, half a small wine glass of sherry, and a table-spoonful and a half of white sugar. Set the jelly over the fire again and let it boil five minutes, it is then fit for use.

Creme de Ris.—Boil three table-spoonfuls of ground rice in a quart of water. When one-half of the water has evaporated, strain the rice; blanch twelve sweet almonds and six bitter ones, pound them in a mortar and add them to the rice with a couple of table-spoonfuls of white sugar and a tea-spoonful of orange water, or ten drops of the essence of cinnamon. This preparation should be taken

by invalids in the morning. It is generally used when warm. If any quantity be left let it be re-heated before used, especially if the person is very delicate:

Port Wine Jelly.—Soak half a pound of isinglass for an hour in as much cold water as will cover it well. Melt half a pound of gum arabic in the same quantity of warm water; when the gum arabic is perfectly dissolved, mix it with the isinglass, and add a pint of port wine and quarter of a pound of pounded rock sugar or sugar-candy. Mix these ingredients well together, boil them twenty minutes, and strain them through a fine piece of muslin. This jelly is very strengthening, and persons suffering with diseases of the throat and chest have been much benefited by it.

Vegetable Soup.—Peel a potato, (an old one,) a turnip, and an onion, and chop them fine with a little celery, or if celery cannot be procured, use the *celery seed*. Season them with salt, and boil them an hour. When the soup is done, pour it over a piece of dry toast. This soup is to be used when animal food would be improper.

Boiled Flour.—Take half a pound of fine flour, tie it up as tight as possible in a linen cloth, dip it frequently into cold water, dredging the outside with flour until a crust is formed upon it; then boil it in a pot of water until it becomes a hard dry mass.

This may be grated and prepared in the same manner as arrow-root, for which it is an excellent substitute.

Molasses Posset.---Put into a saucepan a pint of sugar-house molasses, a tea-spoonful of powdered ginger, and a quarter of a pound of fresh butter. Simmer it over hot coals for half an hour, stirring it frequently. Then stir into it the juice of two lemons, two tea-spoonfuls of vinegar, and two table-spoonfuls of brown sugar; boil the whole for five minutes longer. This is an excellent preparation to relieve colds, and is also particularly serviceable to persons subject to constipation.

Jelly of Iceland Liverwort.---Mash an ounce of liverwort and pick off the stalks or any small particles of moss which may adhere to it. Re-wash it in warm water, pour that away and soak the liverwort all night in as much cold spring water as will cover it. Then place it in a pan with an additional quantity of water, (from one to two quarts,) and let it boil gently for four hours. Strain it through a muslin sieve, add the juice of half a lemon, and sweeten it according to the taste of the patient. It may be taken either warm or cold, and is excellent for consumptive persons, for persons suffering with the dysentery or diarrhoea, and for the whooping cough.

Fresh Calf's Feet Jelly.---Scald, take off the hair, and wash very clean four calf's feet. Put them in a saucepan with two quarts of cold water, let them simmer for six hours, skimming them well; take out the feet and strain the liquor. When cold, remove the fat carefully from the top, and boil the liquor until it is reduced to about one quart of jelly. Then add to it a wine glass of white wine, the juice of a large lemon or two small ones, the beaten whites of two eggs, and sugar according to your taste. Boil these together ten minutes and pour the jelly out to cool. It must not be taken until perfectly cold. For some patients it is necessary to omit the wine.

Milk Porridge.---Wash half a pint of split grits and boil them in two pints of water, until they are thoroughly cooked, which will be easily discovered by tasting them. Strain them, add a pint of milk to the liquor and boil it again for ten minutes, sweeten it, and serve it with toast.

Water Gruel.---Stir a table-spoonful of oatmeal into a pint of water, after it has well mixed boil it for twenty minutes. Strain it through a sieve, add a small piece of fresh butter, and salt according to your taste. It should be eaten warm.

Cranberry Gruel.---Boil a table-spoonful of oatmeal in

a couple of quarts of water for twenty minutes. Mash half a pint of fresh cranberries or cranberry jelly, sweeten them with a quarter of a pound of sugar (or more if the patient prefers the gruel sweeter,) mix the cranberries with the oatmeal, add the peel of half a lemon, and boil the whole from three quarters of an hour to an hour. When you take this gruel from the fire add a small wine glass of sweet wine.

Currant Gruel.—Make the gruel as above, and instead of cranberries use ripe currants or currant jelly.

Stewed Prunes.—Soak the prunes for a couple of hours in as much water as will cover them, then boil them until the stones begin to slip out, add sugar to your taste, and a small quantity of lemon-juice, but the latter may be omitted. Physicians consider stewed prunes a safe nourishment in fevers. They are excellent in all cases of constipation of the bowels, and are particularly efficacious in loosening the bowels if taken warm.

CHAPTER IV.

DRINKS FOR THE SICK AND CONVALESCENT.

WATER is a necessary constituent of animated beings; for without it the circulation of the blood could not be carried on. The watery portion of the blood is constantly escaping from the body by various channels; such as by lungs in the form of vapour, from the skin by the sensible and insensible perspiration, and from the kidneys. It is therefore necessary that this waste be supplied. Dr. Dalton, from experiments made upon himself, calculated that five pounds of water are required as a vehicle to introduce one pound of carbon and azote together into the circulation. This statement, of course, implies absolute carbon and azote; for even the most dry alimentary substances contain water as a constituent. The requirement of water, as a necessary supply for the system, depends as a general rule upon the appetite of thirst. In febrile diseases, the thirst is greatly increased, and this is readily explained by the fact, that a larger proportion of water is carried off by the lungs, from the quickened respiration, and also from the skin by insensible perspiration. Violent and continued exercise causes thirst on a similar principle; for it produces accelerated breathing and increased perspiration, either in the sensible or insensible form. Thirst is therefore as necessary a signal for the supply of water, as hunger is for a supply of food; both of these principles being required for the continuance of life. The importance of water in preserving life is well known; and repeated experiments and observations have shown that the higher classes of animals can survive much longer without food, if liquids be supplied, than when deprived of both. Although water cannot strictly be called an alimentary body, it is indirectly as requisite to support the fulness and

efficiency of the animal fabric, as food which contains carbon or azote. Besides the use of water in supporting the physical weight and muscularity of animals, by its mere position in the vessels, a certain portion of it is necessary in the process of digestion; for solid food requires a certain amount of fluid to reduce it to a proper consistency.

Much drink taken during or after a meal, is injurious to the process of digestion; for though the excess of water is removed very rapidly by the veins and absorbents of the stomach, yet in all cases chymification is retarded, and in dyspepsia is much protracted beyond the usual period. From twelve to sixteen ounces of liquids may be considered an average amount for a healthy individual, but if the digestive organs be weak, three-fourths of this quantity will be sufficient. The temperature of the drink is another circumstance requiring attention. Cold liquids are, in general, most grateful to persons who are thirsty, and a smaller quantity of cold than of warm water will assuage thirst, although the first, from its agreeable quality, is more frequently taken to excess. In cases of indigestion, much cold water ought not to be taken at a draught; for this lowers the temperature of the stomach too suddenly, and is liable to occasion defective chymification. The same holds true with water at a high temperature; for though it is sometimes productive of comfort, the powers of the stomach may afterwards be enfeebled. The periods of drinking, as a general rule, ought to be regulated by the appetite of thirst; but in dyspeptics, drinking much or at irregular times, is apt to occasion uneasiness in the stomach or bowels. Such persons ought therefore to swallow only a small portion of liquid at a time, or the mouth and throat may be frequently gargled with cold water; this practice being often successful in assuaging thirst.

Cold water when drank to excess during profuse perspiration, more particularly if this be accompanied with exhaustion after protracted and laborious exercise, is apt to produce dangerous effects. This danger is in many cases lessened, if not altogether prevented, by keeping up the exercise for some time after the draught has been

taken; a fact well known to postillions. Another method is adopted by many persons under these circumstances, namely, the addition of a portion of ardent spirits to the water; which, in general, prevents any injurious effects, unless the quantity of the latter be very great. It is a practice, however, not to be recommended except in particular cases; and it is much safer to take a single mouthful at a time, and repeat this at intervals, until thirst is allayed.

Water is the basis of all the different kinds of drinks, and the less of foreign ingredients they contain, with the exception of pure acids, they extinguish the sensation of thirst the more effectually. Indeed, there can be very little doubt that water containing much saccharine matter in solution, though it may for a few minutes abate the sensation, afterwards frequently increases it

A Most Pleasant and Strengthening Draught.—Boil a quarter of an ounce of isinglass shavings with a pint of new milk until only half is left; add a bit of sugar, and, for change, a bitter almond.

Give this at bed-time, not too warm.

Barley Water.—Wash extremely well an ounce of pearl-barley; sift it twice, then put to it three pints of water, an ounce of sweet almonds beaten fine, and a bit of lemon-peel; boil till you have a smooth liquor, then put in a little syrup of lemon.

A Delightful Beverage.—Boil three pints of water, with an ounce and a half of tamarinds, three ounces of currants, and two ounces of stoned raisins, till near a third be consumed. Strain it on a bit of lemon-peel, which remove in an hour, as it gives a bitter taste if left long.

An Agreeable Drink.—Put a tea-cupful of cranberries into a cup of water, and mash them. In the mean time boil two quarts of water with one large spoonful of oatmeal and a bit of lemon-peel; then add the cranberries, and as much fine refined sugar as shall leave a smart fla-

vour of the fruit, and a quarter of a pint of sherry, or less, as may be proper : boil all for half an hour, and strain off.

Soft and Fine Draught for those who are Weak and have a Cough.---Beat a fresh-laid egg, and mix it with a quarter of a pint of new milk warmed, a large spoonful of rose-water, and a little nutmeg grated. Do not warm it after the egg is put in. Take it the first thing in the morning and the last at night.

Toast and Water.---Toast slowly a thin piece of bread until it is extremely brown and hard, but not the least black ; then plunge it into a jug of cold water, and cover it over an hour. This is of particular use in weak bowels. It should be of a fine brown colour before drinking it. Let the toast remain at the bottom of the jug.

Whey.---Put a pint of milk into a stewpan or other vessel before the fire, add to it half a table-spoonful of rennet. When the curd forms, cut it into squares to allow the whey to escape. Then put it on a sieve carefully, for it must not be burned.

Lemon Water, a Delightful Drink.---Put two slices of lemon thinly pared into a tea-pot, a little bit of the peel, and a bit of sugar, or a large spoon of capillaire ; pour in a pint of boiling water, and stop it close two hours.

Apple Water.---Cut two large apples in slices, and pour a quart of boiling water on them ; or on roasted apples ; strain them after they have stood two or three hours, and sweeten lightly.

White Wine Whey.---Put a pint of new milk on the fire ; the moment it boils up, pour in as much sound raisin wine as will completely turn it, and it looks clear ; let it boil up, then set the saucepan aside till the curd subsides, and do not stir it. Pour the whey off, and add to it half a pint of boiling water and a bit of white sugar. Thus you will have a whey perfectly clear of milky particles and as weak as you choose to make it.

Vinegar and Lemon Wheys.---Pour into boiling milk as much vinegar or lemon-juice as will make a small quantity quite clear, dilute it with hot water to an agreeable smart acid, and put to it a bit or two of sugar. This is less heating than if made of wine; and, if only to excite perspiration, answers as well.

To Mull Wine.---Boil some spice in a little water till the flavour is gained, which will be ascertained by the taste, then add an equal quantity of port, some sugar and nutmeg; boil them together, and serve with toast.

Another Way.---Boil a bit of cinnamon and some grated nutmeg a few minutes in a large tea-cupful of water: then put to it a pint of port wine, and add sugar to your taste; beat it up and it will be ready.

Or it may be made of good British wine.

To Make Coffee.---Put four table-spoonfuls of fresh-ground coffee, of the best quality, in a coffee-pot, and pour eight coffee-cups of boiling water on it; let it boil six minutes, pour out a cupful two or three times, and return it again; then put two or three isinglass-chips into it and pour one large spoonful of boiling water on it, and boil it five minutes more, and set the pot by the fire to keep hot for ten minutes, and you will have coffee of a beautiful clearness.

Fine cream should always be served with coffee, and either pounded sugar-candy or refined loaf sugar.

Coffee Milk.---Boil a dessert-spoonful of ground coffee in nearly a pint of milk, a quarter of an hour; then put into it a shaving or two of isinglass, and clear it; let it boil a few minutes, and set it on the side of the fire to grow warm. This is a very fine breakfast: it should be sweetened with sugar of a good quality.

Chocolate.---Those who use much of this article will find the following mode of preparing it both useful and economical:---cut a cake of chocolate in very small bits; put

a pint of water into the pot, and, when it boils, put in the above; stir it off the fire until quite melted, then on a gentle fire till it boil; pour it into a basin, and it will keep in a cool place eight or ten days, or more. When wanted, put a spoonful or two into the milk, boil it with sugar, and stir it well. This, if not made thick, is a very good breakfast or supper.

Salop.—Boil a little water, wine, lemon-peel, and sugar together: then mix with them a small quantity of salop powder, previously rubbed smooth with a little cold water; stir it all together, and boil it a few minutes.

Sago Milk.—Cleanse the sago well, and boil it slowly, with new milk. It swells so much, that a small quantity will be sufficient for a quart of milk, and when done the milk will be diminished to about a pint. It requires no sugar or flavouring.

Asses' Milk.—Far surpasses any imitation of it that can be made. It should be milked into a glass that is kept warm by being immersed in a basin of hot water.

The fixed air that it contains gives some people a pain in the stomach. At first a tea-spoonful of rum may be taken with it, but should only be put in the moment it is to be swallowed.

Artificial Asses' Milk.—Boil together a quart of water, a quart of new milk, an ounce of white sugar-candy, half an ounce of eringo-root, and half an ounce of conserve of roses, till half be wasted.

This is astringent, therefore proportion the doses to the effect.

Another.—Mix two spoonfuls of boiling water and two of milk, with an egg well beaten; sweeten with pounded white sugar-candy. This may be taken twice or thrice a-day.

Another.—Boil two ounces of hartshorn shavings, two ounces of pearl-barley, two ounces of candied eringo-root, and one dozen of snails that have been bruised, in two quarts of water to one. Mix with an equal quantity of new milk, and take it twice a-day.

A very Wholesome Drink.—Into a tumbler of fresh cold water pour a table-spoonful of capillaire and the same of good vinegar.

Tamarinds, currants fresh or in jelly, or scalded currants, or cranberries, make excellent drinks, with a little sugar or not as may be agreeable.

A Refreshing Drink in a Fever.—Put a little tea-sage, two sprigs of balm, a little wood-sorrel, into a stone jug, having first washed and dried them; peel thin a small lemon and clear from the white; slice it, and put a bit of the peel in; then pour in three pints of boiling water, sweeten and cover it close.

Dr. Abernethy's Sweet Buttermilk.—Take the milk from the cow into a small churn; let the churn be one-quarter full. In about ten minutes begin churning, and continue until the flakes of butter swim about pretty thick, and the milk is discharged of all the greasy particles and appears thin and blue. Strain it through a sieve and drink it as frequently as possible.

It should form the whole of the patient's drink, and the food should be biscuits and rusks, with ripe and dried fruits.

Orgeat.—Beat two ounces of almonds, with a tea-spoonful of orange-flower water, and a bitter almond or two; then pour a quart of milk and water to the paste. Sweeten it with sugar. This is an excellent drink for those who have delicate chests. In the gout also it is highly serviceable, and when used with the addition of half an ounce of gum arabic, it has been found to allay the painfulness of the attendant heat. If it is thought too cooling in the latter complaint, half a glass of brandy may be added.

Orangeade or Lemonade.—Squeeze the juice of two lemons or oranges, pour boiling water over half the peel of one, and cover it close. Boil a pint of water with as much sugar as will make a thin syrup, and skim it well. When all are cold mix the juice, the infusion, and the syrup with as much more water as will make a sherbet, and strain it through a jelly-bag.

Egg Wine.—Beat an egg perfectly light, and mix with it a spoonful of cold water; set on the fire a glass of white wine, half a glass of water, three tea-spoonfuls of sugar, and a little grated nutmeg. When it boils, pour the water over the egg by degrees until the whole is in, stirring it well all the time; then return the whole into a saucepan, put it on a gentle fire, stir it one way for not more than a minute. If it boils, or if the egg is stale, it will curdle and is unfit for use. Serve it with toast.

Egg wine may also be made without warming the egg, and it is then lighter on the stomach though not so pleasant to the taste.

Infusion of Malt.---Pour over any quantity of ground malt which you may desire to use, as much boiling water as will make it a very thin batter. Cover it for two hours and then strain it, and add sugar and lemon-juice. It should be taken when perfectly cold.

Bran Tea.---Stir a pound of fresh wheat bran into two quarts of water. Boil away one quart; strain the bran, and sweeten the tea with sugar, honey, or molasses, according to the taste of the patient.

Mulled Ale.—Boil a quart of good ale with a little grated nutmeg. Beat up six eggs and mix them with a small portion of cold ale, pour the hot ale over the cold, and return the whole to the vessel in which the eggs were first mixed and back again into another vessel several times, to keep the eggs from curdling. Stir the ale well, add a small bit of butter and a glass of brandy, and serve it with dry toast.

Baked Milk.—This is an excellent article for weak or consumptive persons. Put half a gallon of milk into a jar, tie it down with writing paper, and let it stand all night in a warm oven; by morning it will have acquired the consistence of cream, and may be drank as occasion requires.

Seed Water.—Take two spoonfuls of coriander seeds, and one of caraway seeds, pound them in a mortar, and let them soak for several hours in a quart of water. Strain them, beat up the whites of two eggs, (some persons prefer the yolks,) and mix them with the water, then add a wine glass of sweet wine, and as much lump sugar as you find agreeable to your taste. If the weather is warm a small lump of ice will make this beverage more agreeable.

Ale Posset.—Warm a quart of milk with a piece of wheat bread in it, and then warm a quart of ale with two table-spoonfuls of sugar, and a little grated nutmeg. When the milk boils pour it upon the ale, let it stand ten minutes to clear, and it will then be fit for use.

Flax Seed Lemonade.—Boil some flax seed in water until it becomes thick syrup. To a table-spoonful of flax seed allow two large tumblers full of water. Strain the flax seed when perfectly boiled through a cloth, and mix with the liquor a quarter of a pound of white sugar, then stir in the juice of half a lemon. This mixture has frequently been very serviceable in relieving a cold. A little of it may be taken whenever the cough is troublesome. A small quantity of gum-arabic added to the syrup will be an improvement. Rock candy is sometimes used in place of sugar, and it is preferable.

Cocoa and Cocoa Shells.—To two ounces of cocoa allow a quart of water. Put it in a saucepan, and let it boil slowly for about one hour, strain it and re-boil it with the milk. Cocoa shells boiled in this manner will make a very pleasant beverage, and are not so rich as the ground cocoa.

After boiling they should be strained, and the milk being added to the liquor, it should be boiled for a few minutes again. It will keep when cold, and can be heated at pleasure.

A Good Drink from Dried Cherries.—Pour two pints of boiling water over half a pound of dried cherries, (the bitter ones are preferable,) let the water stand for half or three quarters of an hour, then strain it, and after sweetening it to your taste, let it boil again. It makes an excellent drink to moisten the mouth in cases of fever. It may be used cold, but is generally preferred when warm.

Lemon Whey.—Squeeze the juice of two lemons, and after boiling two pints of milk with two of water, add the lemon-juice and boil the milk for five minutes longer. Sweeten it; and if drank when warm, it will be found excellent in promoting perspiration.

Beef Tea to Drink Cold.—Take a pound of lean beef, clear it from every particle of skin, fat, or sinew, rasp or divide it into very small pieces; then put it into a jar, and pour a quart of boiling water upon it; plunge the jar into a kettle of boiling water, let it stand by the side of the fire, but not near enough to simmer, and allow it to grow cold. Then strain the beef-tea through a muslin-sieve, and if the patient be very delicate, filter it through blotting paper.

This tea is to be taken when cold, and will remain upon the stomach when other nourishment fails: it may be given to infants.

Beef Tea to Drink Warm.—Cut a pound of fleshy beef in thin slices; simmer with a quart of water twenty minutes after it has once boiled and been skimmed. Season, if approved; but generally only with salt. Drink it warm, crumbling into it a slice of toast.

CHAPTER V.

DIRECTIONS FOR THE RECOVERY OF DROWNED PERSONS.

1. As soon as the body is taken from the water, the mouth and nostrils should be cleansed, and all the frothy mucus which may be collected in the throat, should be removed by the finger enveloped in a handkerchief.

2. The wet clothes should be removed ; the body wiped dry, and wrapped in a dry flannel blanket, and carried on a board, with the head and shoulders somewhat elevated, to the nearest habitation.

3. The patient is now to be placed upon his back on a cot, in the centre of the room, with the chest and head slightly elevated, and if the weather be cold, frictions with hot flannels should be employed over the body and extremities, and bottles of hot water applied to different parts, while preparations are making for producing artificial respiration.

4. Pressure should be made upon the breast and abdomen, alternating with relaxation, in such a manner as to imitate the actions of the chest in respiration ; or, this may be accomplished more perfectly by the following means :

5. Take a piece of strong flannel, an old blanket, sheet, or other cloth ; cut from it a piece six feet in length, and eighteen inches in breadth. Six strips, each three inches broad and two feet long, are then to be cut or torn lengthwise at each end ; while the untorn portion (two feet in length and eighteen inches broad) is to be placed under the back of the patient, from the arm-pits to the upper part of the thigh-bones. The strips are then to be brought together over the chest and abdomen, interlacing each other from the opposite sides, and then, being gathered

into a bundle, each end is to be drawn in opposite directions by a couple of assistants, so as to make firm and equable pressure ; it should then be relaxed, so as to allow the chest to expand, and this process should be continued at the rate of about twenty times in the minute.

6. While these means are being resorted to, a pair of bellows should be procured, and the pipe inserted into one nostril, while the mouth and the opposite nostril are closed by an assistant, and the prominent part of the wind-pipe (commonly called Adam's apple) is gently pressed back. Then by forcing air into the lungs, and alternately expelling it by pressing the chest, respiration may be imitated.

7. If a bellows is not at hand, the operator should close the nostrils, and apply his mouth to that of the patient, and blow forcibly into it, pressing the chest afterwards so as to expel the air, and again blowing forcibly into the chest.

8. If the lungs cannot be inflated in this way, the operator should blow into one nostril, having closed the other and the mouth ; and if a small wooden tube can be procured, this can be used for the purpose, by inserting one end into the nostril and blowing into the other ; or the pipe of a bellows may be inserted into it, pressing back the *larynx* (Adam's apple,) as above described.

9. These means are to be diligently employed for at least two or three hours, or, until medical aid be obtained. There are many instances on record, where resuscitation took place, several hours after the commencement of the measures herein recommended.

CHAPTER VI.

FAMILY MEDICAL RECIPES.

Rheumatism.—Costiveness should always be carefully avoided, but most especially by persons subject to rheumatic pains, and this should generally be done by regulating the diet as formerly directed.

Rheumatism is a general disease, of which pain in the joints, &c., are merely symptoms. The treatment, therefore, must be controlled by general principles, and the patient placed under a skilful medical practitioner. In the absence of such assistance, keep the affected parts well covered with flannel, or *raw* cotton. A thin piece of cotton batting sewed inside of the shirt-sleeves or the back of the shirt, has afforded great relief when the back or arms were affected with rheumatic pains. This remedy should be resorted to on the first symptoms of an attack.

Rub the part affected with flannel and then with the hand until a glow is produced, after that anoint the parts with a quarter of an ounce of ether and an ounce of amber oil well mixed together. Repeat the application twice a day, always covering the part when you have done with warm flannel, and a cure will be easily effected.

A soft poultice of mustard may sometimes be applied with advantage.

An ounce of camphor dissolved in half-a-pint of spirit of turpentine, is very useful in chronic rheumatism. It should be used morning and evening.

For very acute rheumatism thirty drops of the tincture of colchicum, with ten grains of calcined magnesia with each dose, may be used four or five times a day.

For Hoarseness, Coughs, and Colds.—A glass of cold

water drunk the last thing at night, just before stepping into bed, will often relieve a recent cold.

Boil a handful of horseradish root for half an hour in as much water as will cover it, then remove the horseradish and add half or three quarters of a pound of brown sugar, and boil the mixture a quarter of an hour longer ; this is excellent for a cold, in very aged people, and should be taken several times a day.

For a cold accompanied with great hoarseness, make a water-gruel, into which four onions have been well boiled, while the gruel is warm add to it a lump of butter, a little pepper, and as much salt as you like. Take it hot after you are in bed.

For a bad cough mix eight tea-spoonfuls of molasses with eight of vinegar, two of antimonial wine, and four drops of laudanum. Two tea-spoonfuls of this mixture are to be taken at night and one in the morning.

Hyssop tea is excellent for sudden colds ; but after using it persons should be very careful to guard themselves from draughts of air, and against all exposures, as it renders them very liable to take further cold.

Very inveterate coughs have been cured by a tea made of equal proportions of flax-seed and colt's-foot. Boil them well together, strain the liquor, and use it with honey. Use it throughout the day.

Hoarhound tea is excellent for colds and especially for hoarseness. Hoarhound is even more efficacious when it is mixed with equal quantities of lungwort, maiden-hair, hyssop, and elecampane. Steep them together in boiling water for about an hour. Strain them, boil the liquor again, sweeten, and use it.

For a chronic cough or cold, pound up four ounces of rock candy, mince three ounces of Malaga raisins, and pound the raisins and candy together ; add half an ounce of the conserve of roses, eight drops of vitriol, and ten of oil of sulphur. A tea-spoonful of the mixture the first thing in the morning and the last at night.

In cases of whooping cough, no medicine should be taken unless recommended by a physician. The child

should be kept quiet, and fed with light and nourishing diet. Every thing drank should be warm or tepid. If there is fever give an emetic of chamomile flowers, with syrup of ipecac. The patient should be clothed with flannel next to the skin. The pulp of onions applied to the soles of the feet, will often relieve the cough.

Liquorice and gum arabic, chewed at pleasure, are very serviceable in the early stages of a cough.

For a sudden hoarseness, take twice or thrice a day, a tea-spoonful of spirits of nitre in a wine-glass of water.

To restore the voice, eat a piece of anchovy and it will almost instantly restore it to any one who has become hoarse by loud speaking.

Black currants, picked fresh from the bush, is one of the best and speediest cures for hoarseness. A jelly similar to red currant jelly is made of black currants, which is also very powerful in restoring the voice and giving it strength and clearness.

Be careful to avoid all *medicated cough lozenges*, such as are advertised in the newspapers. They all contain more or less *morphine*, which is a deadly poison, especially to young children.

In general, the less fluids drank in cases of colds, the better.

Sore Throats.—Abstinence from food, and a small dose of Epsom salts, followed by a drink of cream of tartar, with a mustard application externally, will generally relieve the worst cases of sore throat. The feet should be bathed, at bed-time, in a hot mustard bath.

The stocking which has been worn all day, if bound around the throat at night, will often relieve a recent sore throat.

The steam of hot vinegar inhaled through the tube of a tunnel is excellent for a sore throat, and will sometimes relieve it when the throat is exceedingly sore. This operation should be performed carefully, or the throat may be scalded.

Roast a sour apple and mix the pulp with a tea-spoon-

ful of Scotch snuff, wetting it with spirits of wine ; apply this as a poultice to a throat which is very sore, and bind up with a linen rag. This poultice is very efficacious in the throat distemper ; or, the snuff may be made into a paste with flour.

The use of black currant jelly will often cure a sore throat. This jelly should be eaten several times during the day.

Wear a strip of flannel around the throat moistened with liniment, while it is sore : when the throat gets well leave off the flannel, taking care to remove it for the first time, when you dress in the morning, and to bathe the neck with cold water.

Gargles for Sore Throat.—Fresh yeast makes a good and powerful gargle.

Figs boiled with milk and water and a small quantity of *sal ammoniac*, are serviceable as a gargle.

A table-spoonful of honey, one and a half of vinegar, and a tea-spoonful of salt, mixed with a tumbler of water, make an excellent gargle.

Another gargle may be made by pouring boiling water over red rose-leaves, (either fresh or dry,) and letting them stand an hour. Strain them, and add a few drops of oil of vitriol to the liquor—about five drops to every tumbler full of water.

An excellent gargle is made of sage. Immerse the sage in boiling water, let it stand ten minutes, strain it and mix with the liquor a lump of alum, using a lump as large as two peas for every tumbler full of the liquor. This makes an excellent gargle for a sore throat. The throat should be gargled four or five times a day.

Liniment for Sore Throats.—One of the best remedies for quinsy, sore throat, and for common inflammation of the throat, is the use of the following liniment : pour an ounce of sweet oil with six drachms of the spirit of harts-horn, in a bottle, and shake them well together. Wet a large piece of flannel with the liniment, and bind it around

the throat. This flannel should be remoistened with the liniment as often as it dries.

In the ulcerated sore throat of scarlet fever, an excellent gargle is made, by mixing twelve fluid drachms of the solution of chlorinated soda, four drachms of honey, and six ounces, or a half-pint tumbler of water.

Another gargle, much employed in the same disease, is prepared, by infusing half a drachm of the powder of cayenne pepper in a pint of boiling water, or adding half a fluid ounce of the tincture, to eight fluid ounces of rose-water.

Asthma.—In bad cases of asthma, a physician should always be consulted—as temporary remedies, or where a physician is not at hand, a mustard plaster should be applied to the chest, and the feet immersed in a strong, hot decoction of mustard, and the vapour of hot water inhaled through a funnel. The apartment is to be freely ventilated, and warmed by a wood fire in the chimney; the bowels should be relieved by a mild cathartic, as castor oil. Where there is much *mucus* on the lungs, as shown by a wheezing respiration, vomiting will be highly useful. Smoking the dried leaves of *stramonium* has long been a very popular remedy for this affection. Opiates of every description are decidedly dangerous.

A cup of strong coffee will often give temporary relief to a person suffering from asthma. No sugar or milk should be mingled with the coffee.

A little vinegar or a few grains of nitre mixed with toast and water, will afford considerable relief, if the toast and water is drank throughout the day, at every indication of thirst. External warmth is indispensable.

Palpitation of the Heart.—All species of excitement should be avoided by persons afflicted with this distressing malady. Gentle and regular exercise, a mild, but nutritious diet, and frequent bathing of the feet in warm water, will be found very beneficial to those who have not neglected the disease until it has become confirmed. All spirituous liquors must be carefully avoided.

As this affection is often caused by derangement of the digestive organs, it is necessary to pay great attention to the diet and to avoid every thing of an indigestible nature, and such articles of food as experience has shown to be deleterious. In general, a mild vegetable diet will be preferable to a stimulating one of animal food.

Dysentery, Cholera-Morbus, Cholic and Cramp.—In mild cases of the former, mix together a table-spoonful of West-Indian rum, a table spoonful of sugar-house molasses and another of good sweet oil, place the mixture over the fire until it begins to boil, and drink it warm.

A porridge made of flour boiled in milk forms good food in cases of dysentery, which are not attended with much pain or fever.

Flannel moistened in hot brandy and cayenne pepper, and laid upon the bowels, affords great relief in cases of extreme distress.

English mallows steeped in milk and drank freely, is very efficacious in cases where the bowels are inflamed.

Boil four ounces of chamomile flowers and the tops of as much wormwood in a gallon of water; pour off the liquor, put it again upon the fire, dip in a piece of flannel, and apply it to the bowels as warm as the patient can bear it. When this grows cold dip in another piece of flannel, and continue to repeat this until the part is eased, observing that as you change the flannel you do not admit the air to the affected part.

For cases of cholera-morbus and dysentery, burn a piece of cork as large as a small nut until it is quite black, powder it fine, mix a tea-spoonful of brandy, one quarter of a grated nutmeg, and a little loaf sugar, and it will be found very efficacious.

Blackberry tea, or a tea made of the roots and leaves of the blackberry bush, is very beneficial to persons suffering with the dysentery. A syrup made of blackberries is also serviceable.

A tea made of summer-savory is good for the cholic. Pennyroyal and tansy are good for the same purpose.

For cholic and cramp, caused by a fit of indigestion—beat the white of an egg to a froth, add to it a table-spoonful of brandy, and a wine-glass of hot water, grate into it a little nutmeg, and drink it warm.

In slight cases of cramp in the limbs, relief may be procured by suddenly darting out the limb—if the foot, by standing upon it—and if the hand by firmly clenching it—benefit may also be derived by fomenting the part in warm water.

A tea-spoonful of ether or hartshorn followed by twenty drops of laudanum mixed in water, will relieve a severe attack of cramp in the stomach.

Strong chamomile tea taken at bed time as hot as can be swallowed, is considered one of the best remedies in indigestion, cholic, pains and obstructions of the bowels, especially when arising from cold. A cup of strong coffee taken hot upon an empty stomach, will often be as efficacious as chamomile in either of the above cases.

Indigestion and Dyspepsia.—Sedentary persons are often afflicted with indigestion, which, when neglected in the beginning, becomes a confirmed disease. The free use of cold water in drinking, washing, and bathing, will frequently effect a cure, aided by other means. Early rising, light and nutritious food, moderate exercise, and abstinence from all spirituous drinks, will in the early stages of the complaint be highly useful, and generally sufficient to remove the disease.

A tea made of dried whortleberries and sweetened with molasses, is very beneficial to children when their digestive functions are out of order.

A tea made of *thoroughwort* and drank cold, is very serviceable in relieving dyspepsia and indigestion in all its forms.

Succory tea has the same effect, and is one of the best remedies known, for chronic affections of the liver and visceral obstructions.

Tea made from elder-blow will assist digestion and very often restore the digestive organs, when seriously impaired, to a healthy state.

Inflammation of the Bowels.—This is a very dangerous complaint, and one in which the advice of a physician is especially needed. When the belly is painful to the touch, or swelled, it should be covered with a mustard plaster, and afterwards kept constantly moistened with flannels dipped in hot water and wrung out. The patient should be laid between flannels instead of sheets, and on no account upon linen sheets, which are too chilling.

Piles.—The piles arise from many different causes, and require different modes of treatment.

When they arise from weakness, the parts should be washed four or five times a day with warm water, and the bowels kept open by the mildest laxatives. The patient should also sit over the steam of water every morning immediately after breakfast.

When the piles arise from costiveness they may be removed by gentle purgatives, such as the conserve of senna.

Half an ounce of cream of tartar and an ounce of sulphur mixed with molasses, will be found very serviceable in removing the piles. Take a tea-spoonful of this mixture four or five times a day.

A tea made of slippery elm, if drank very plentifully, will be found good for the piles. It may be made palatable by sweetening it and adding a little lemon juice.

Boil together equal quantities of sulphur, lard, and cream of tartar, and bathe the parts affected. This will be found excellent in severe cases of the piles.

Another excellent ointment for the piles may be made of the beaten yolk of an egg mixed with an ounce of emollient ointment, and a quarter of an ounce of laudanum. Use this twice a day.

Lard mixed with powdered nutgalls is also good. When the piles are external, very painful and swollen, leeches should be applied, followed by warm fomentations and soft poultices.

Clysters.—A clyster is in many cases a safer remedy

and gives greater relief with less pain, than cathartic medicines.

A clyster of warm spring water with a little Castile soap is used daily by numbers of French ladies, who believe that it greatly promotes their health.

A good clyster may be made of strained water gruel to which is added a table-spoonful of salt and another of oil.

A grown person should have about a quart injected.

A table-spoonful of molasses, one of brown sugar, two of sweet oil, and a tea-spoonful of salt, mixed with two pints of warm water, makes an active clyster.

The suds of Castile soap are generally used as a clyster for young children.

Cancer.—*True cancer*, generally appears in the form of a hard lump or swelling in the breast, or some other glandular organ. There are many tumours, resembling cancer in the commencement, which are often mistaken for it; and the cure of which has sometimes given great credit to cancer quacks and their specifics—as none but a scientific physician can tell the difference between such swellings and those of a cancerous nature, none others should be consulted in such cases. The *cancer plasters*, so much in vogue, for *drawing out cancer by the roots*, are composed chiefly of *arsenic*, and more often *draws out* the life of the patient than the disease. Avoid such, as you would the plague or the small pox, as well as quack remedies of every description,—attention to food, exercise, ventilation, and cleanliness, with a quiet conscience, will accomplish more in the cure of any disease than all the quack medicines in the world. In case, therefore, of a *hard, stony tumour*,—especially if it be in the breast,—and attended occasionally with sharp, lancinating, and shooting pains, consult a reputable surgeon immediately, and have it removed by the knife. If delayed until it breaks out into an open ulcer. there will reman but little hope of effecting a cure.

Jaundice.—But little can be expected in this disease

from domestic management, except in seeing that the directions of the physician are strictly adhered to ; and in endeavouring to cheer the spirits and support the hope of recovery in the invalid.

The *warm bath* is highly useful, and it should be continued long enough to produce great languor, or a disposition to faint. Friction all over the body, with hair gloves, will hasten the disappearance of the yellow hue of the skin, and facilitate recovery.

In mild cases, ripe fruits may be eaten with benefit. The patient should live entirely on vegetable food, and drink buttermilk or whey rendered palatable by honey.

Many persons profess to have been cured by eating nothing but raw eggs for several days.

Steep equal quantities of barberry bark, black cherry-tree bark and horseradish, in as much cider as will cover them well. Let them stand twelve hours, strain them and drink half a tumbler of the liquor twice a day in mild cases, and where a physician cannot be had.

A strong tea made out of the roots of dandelions is also a cure for the jaundice.

Heart Burn.—A tea made out of calamus, or calamus grated in water, will sometimes relieve the heart-burn.

A tea-spoonful of powdered gum arabic and another of bark, dissolved in a large wine-glassful of water, will have the same effect. A little soda or pearlash, dissolved in water, is very useful.

Croup.—Croup is a disease which chiefly attacks children. It may be known by the harsh, ringing character of the cough, as if it came through a brazen trumpet. The voice is also changed, and the drawing in of the breath is attended with a wheezing noise, like air forced through a narrow tube. The child complains of a choking sensation ; the nostrils dilate ; there is often much fever ; the countenance is flushed ; the eye is blood-shot and tearful ; and the sleep disturbed.

The *syrup* or *powder of ipecac* should always be kept

in the house, where there are children, and on the first symptoms of this disease, a tea-spoonful of the syrup, or half this quantity of the powder, should be given in sweetened water every fifteen minutes, till full vomiting be brought on. The feet in the meantime to be immersed in hot mustard water, and the family physician to be sent for. Everything here depends on early and prompt treatment.

If ipecac is not at hand dissolve two grains of *emetic tartar* in half a pint of warm water, and give a tea-spoonful every four or five minutes, until it operates as an emetic; and repeat the vomiting every hour or two, according to circumstances.

When a purgative is given, castor oil should be preferred, although calomel is considered even more efficacious. But this latter medicine should not be used without the advice of a physician. When it is used, give an infant of six months old, a grain and a half every hour until it purge freely. To a child a year old, give two grains; to one of two years, three or four grains may be given every hour, until the bowels are freely acted upon.

The child should drink nothing but gruel, lemonade, &c. No animal food or broths should on any account be allowed.

Hysterics.—*Hysteria* is to be cured by general treatment, and attention to diet, exercise, pure air, &c. During the paroxysm, dash cold water on the face and breast, apply towels dipped in cold water to the forehead; roll the feet in hot flannels; apply hartshorn to the nostrils; loosen all tight articles of dress; and prevent the tongue from being bitten by putting a napkin folded between the teeth. If the spasms are very severe and protracted, administer a glyster, composed of half a pint of gruel, and an ounce of oil of turpentine, or one drachm of tincture of assafœtida.

Motherwort tea, which is very quieting to the nerves, is an excellent preventive to hysterics, and may be taken the instant the patient feels a fit coming on.

In Germany, caraway seeds finely ground, with a little ginger and salt, spread upon bread and butter, are eaten

every day, especially at night and morning, as a remedy for hysterics. As preventive means, the shower-bath; sponging with salt-water; early rising; regular exercise; sleeping on a hair-mattress, and the avoidance of all luxurious indulgence, are indispensable.

Canker.—A small piece of alum held in the mouth will often remove the canker. The alum is better if slightly burnt in the flame of a candle.

Gravel.—In cases of *gravel*, domestic treatment will generally do more harm than good. Medical advice should, therefore, always be sought in this affection, and the directions carefully followed. As there are different kinds of gravel, the proper remedy can only be known to the scientific practitioner, and after diligent investigation. Avoid all *gravel doctors*, and gravel infirmaries, as you would a cancer-quack.

Fevers.—In the treatment of *fevers*, judicious domestic management is very important. Medical advice is always to be sought for, and strictly followed. Unless prompt attention be paid to the premonitory symptoms, such as languor, lassitude, head-ache, and nausea, before chills and heats display themselves, there is great danger that the disease will run its course, even in spite of medical aid. But if attended to early, fevers, like most other complaints, may be broken up.

When the symptoms above-mentioned therefore appear, a cathartic of salts, or rhubarb and magnesia, or castor oil may be taken, followed (upon their operation) by a hot foot-bath, and warm drinks, to bring on perspiration, which should be kept up for several hours. The diet should consist of gruel only.

In *intermittent fever*, or *fever and ague*, (which is the same thing,) *specifics* should be avoided, where physicians can be consulted—where they can not, two grains of quinine may be taken every two hours, between the paroxysms, being careful to keep the bowels open, and avoid spirituous liquors.

Worms.—The best remedy for worms is strong *pink-root tea*, followed by senna. Steep an ounce of the root and plant, in a pint of boiling water to half a pint, and give a wine-glassful to a child three years old, in the morning, fasting. Increase the dose according to the age. Or ten grains of the powdered root may be given to a child of eight or ten years old, morning and evening, for three days, and then followed by a cathartic. If this remedy does not succeed, give ten grains of the *down of cowhage*, mixed in honey or treacle, twice a day for two or three days, and then a dose of oil.

N. B. Avoid all *worm-lozenges*, as they are composed of calomel.

Head-ache.—As this depends on a variety of causes, the treatment, of course, must vary. Persons who are subject to this affection, should pay strict attention to their diet, and preserve their bowels in a regular state. The *cold shower bath* every morning is almost a specific. The *sick head-ache*, is owing entirely to a disordered state of the stomach; its removal, therefore, requires us to avoid the exciting causes: as late suppers; excess in eating or drinking; long fasting; protracted sedentary occupations, and hurry of business and anxiety.

Sometimes, half a tea-spoonful of *citric* or *tartaric acid* in a tumbler full of cold spring water, and drank slowly, will relieve a violent headache.

Washing the head in cold water, rubbing it dry, and exposing it to the air, will sometimes cure the headache.

The head should be kept as cool and as quiet as possible, and the mind unoccupied by any subject that requires deep thought or close attention.

A headache may not unfrequently be cured by keeping the head for half or a quarter of an hour perfectly immovable in an easy posture.

Sage tea will often relieve a headache when it first commences.

Quiet is especially necessary for persons suffering from headache.

Gout.—All high-seasoned and rich food, and all spirituous liquors should be avoided during attacks of the gout, and indeed by persons of gouty habit. The patient's diet must be as plain and nutritious as possible, and consist principally of farinaceous substances, and vegetables easy of digestion.

Mix two tea-spoonfuls of tincture of senna and two of tincture of colchicum, with one drachm of calcined magnesia and four ounces of water, and take one ounce of the mixture three times a day.

Take an equal quantity of crumbs of bread and powdered mustard, and mix it into a poultice with warm vinegar and a little bruised garlic. Apply the poultice to the affected parts.

During attacks of gout in the stomach, bladders of warm water should be applied to the part, and the feet placed for twenty minutes in a hot mustard water bath, and afterward wrapped in mustard poultices.

Iliac Passion.—This is a very dangerous disorder, and arises from various causes; when children are attacked with it, worms are generally the cause. A dose of castor oil should be administered on the first appearance of the disorder, and medical aid instantly summoned.

Itch.—When *itch* first appears in a family, the individual should be separated from the rest of the family, and treated with *sulphur*, both internally and externally. For the former purpose, an ounce of sulphur may be mixed in an ounce of molasses, and a tea-spoonful given night and morning; for the latter, an ounce of sulphur, a drachm of sulphuric acid, and two ounces of hog's lard should be made into an ointment, and one-fourth of it rubbed upon the body, night and morning, until every trace of the eruption has disappeared.

Lethargy.—Relief from the heavy drowsiness incident upon this disease, will often be obtained by frequently washing the head in cold water, and free purging.

If a physician can be procured, no medicine should be administered without his advice.

Measles.—As this disease, like scarlet fever and small pox, is contagious, the patient should be separated from the rest of the family, and kept in bed, even when the disease is mild, and a cooling regimen adopted. No hot drinks, wine or spirituous liquors, nor *saffron tea* should be given to *drive out* the eruption, nor the patient loaded with bed-clothes, nor the temperature of the room raised above 60° Fah. ; where high inflammatory symptoms appear, or the complaint is not very mild, medical aid should be sought. Great caution is required during convalescence, to avoid taking cold. No food, but mucilaginous drinks, is to be allowed during the presence of the eruptive fever.

Keep the room well ventilated, but not too light, as the patient's eyes are apt to be affected. Especially guard the eyes of the patient from the light of a candle or blazing fire.

Linseed tea, sweetened with honey, tamarind water, and barley water, are the best drinks that can be used.

Deafness.—In slight cases of deafness, syringe the ears with warm water and Castile soap, and rub the outside of the ears night and morning with a warm linen cloth, or apply a little *eau de Cologne* behind the ears. The head should always be kept warm if a person is in the least inclined to deafness.

The ears may be syringed with luke-warm spring water slightly impregnated with table salt.

Mix together equal quantities of the oil of sweet almonds and camphorated spirits of wine, and pour six drops into the ear every night. In general, it is safer to consult a physician in such cases.

Wens.—Bathe a wen four or five times every day in strong salt and water. If this remedy is faithfully persisted in, the wen will in many cases disappear, or rub it daily with iodine ointment, which is still better.

Sore Mouths and Lips.—Pour two pints of boiling water over a couple of handfuls of the leaves of the low

blackberry-bush, (or vine blackberry, as it is sometimes called,) sweeten the tea, and drink a cup full morning and evening. It will often cure a sore and ulcerated mouth—especially when the gums have been injured by the use of calomel.

A very good lip-salve may be made by boiling together four ounces of white wax, one ounce of spermaceti, and half a pint of the oil of sweet almonds with as much water as will cover them well. To procure a red colour, after the wax is perfectly melted, add a small quantity of powdered cochineal tied in a bag, or *alkanet root*, prepared in the same way. Boil the wax until it reddens, then remove the cochineal, or alkanet root, and if you wish to give the wax an agreeable scent, add ten drops of the essence of bergamot.

Hiccough.—A few drops of vitriol in a glass of peppermint water will sometimes stop the hiccough.

A tea-spoonful of vinegar diluted in one of cold water will have the same effect. Sometimes a little soda dissolved in water will relieve it.

The hiccough may often be checked by drinking a couple of tumblers full of cold water in rapid succession—also by dashing a little cold water on the back of the neck, or by laying a cold steel or iron key upon the spine between the shoulders; the key must touch the skin—if very cold, the shock it produces will stop the hiccough.

Night Sweats.—The lightest possible food should be used by persons subject to night sweats. Milk, and especially asses' milk, taken warm, will greatly benefit them.

A cup of cold sage tea drunk the first thing in the morning, one in the middle of the day, and another the last thing at night, will often prevent night sweats, and often cure them.

Tooth-ache.—When the tooth-ache is not very severe, a pounded clove placed in the decayed tooth will often stop the pain.

A piece of raw cotton moistened with a few drops of laudanum, and laid on the tooth, will give great relief.

If the gold is accidentally extracted from a plugged tooth, the hole should be instantly filled with white wax, and application made to a good dentist as soon as possible.

A piece of raw cotton moistened with the oil of cajeput, will often instantly relieve the tooth-ache.

If the tooth-ache is so severe as to swell the face, boil together four ounces of white poppy heads, and one ounce of elder flowers; let three quarts of water boil away until only one is left, and bathe the cheek with the liquor, lay the elder flowers upon it, and bind up the face. When the flowers dry, bathe the cheek again, and renew the flowers.

Make a poultice of common chick-weed and powdered ginger, and apply it to the cheek, it will often relieve a very severe tooth-ache. None but professed dentists should be consulted in relation to teeth.

Weak Eyes.—Wash the eyes frequently in cold water if they are in the least inclined to weakness.

Make a wash by pouring boiling water over a jar full of rose leaves; let it stand all night, and then strain the water. It will be found excellent for the eyes, and should be used frequently.

A poultice made of rose leaves is good for a sty upon the eye-lids.

If the eyes are very weak, boil a handful of freshly gathered salad in a pint of water, strain it, and apply the liquor to the eyes at intervals. It will be found very soothing. A poultice of boiled salad leaves will also relieve severe pain in the eyes.

Corns.—Bathe the feet in lukewarm salt and water, and cut the corns with great care regularly every fortnight. If this advice is followed as soon as the corns appear, and the shoes worn are not too tight for the feet, the corns will never give any trouble.

Nothing will bring on corns sooner than the habit of

wearing very *loose* shoes one day and tight ones the next ; unless, indeed, the practice of always wearing shoes much too small.

Corns may be removed by rubbing them every day with pumice-stone, and then with a little caustic solution of potash, or lunar caustic.

Chilblains.—Chilblains, when they are once confirmed, require constant care before they can be effectually removed.

Bathing the feet or hands, (whichever may be affected,) every morning, in a weak solution of vitriol and water, will often remove the chilblains.

Bind up the feet in the thin white skin which comes from suet.

A poultice made of Castile soap and honey, tied on the feet, or hands, at night, will be found very serviceable.

Hold the feet every night over the smoke arising from burning salt hay, and the chilblains will shortly disappear.

Chaps.—Bathe the face and hands every night with honey and water, and it will prevent them from chapping.

Boil two or three potatoes until they can be made soft by crushing them in the hands, rub them on the hands and face at night, and they will prevent chaps.

A little unscented pomatum rubbed on the hands and face at night will cure chaps. Avoid the use of *soap* and warm water.

The hands can be kept white and soft and totally free from chaps, by rubbing them with a tallow candle, and wearing a glove every night.

Cold cream, as prepared by apothecaries, is also good to prevent chaps. The cream is better when unscented.

To remove Freckles from the Face.—Mix one drachm of sugar with half a drachm of powdered borax, and two ounces of lemon juice. Stir them together, pour them in a clean stone jar, and cover them close for a week. After that, wash the hands and face with the liquor every night

and morning. The face should not be exposed to the sun or air after making use of this liquor in the morning, nor indeed at any time unprotected by a thick green veil.

Sore Nipples.—Rub the nipples frequently with sweet oil.

An excellent ointment may be prepared for sore nipples, by boiling together two ounces of diachylon, one ounce of olive oil, and half an ounce of vinegar. Use the ointment when cold and frequently during the day.

An excellent poultice for sore nipples may be made of plantain and house-leek boiled in cream and strained. Use it cold.

The tincture of *catechu* is a good remedy.

Ringworms.—Ringworms may be prevented or cured by washing the head and hands daily with vinegar and water. One part of vinegar to three of water being applied with a sponge.

The whiskey in which Spanish flies have been soaked, will cure ringworms.

Wash a copper cent quite clean, and place it in a cup of vinegar; bathe the ringworms in the vinegar three times a day.

Warts.—To remove warts, wet them and rub them twice or thrice a day with a piece of unslacked lime, or sal ammoniac, or sulphate of copper, or nitrate of silver, when they will imperceptibly be removed without scar or inconvenience.

The juice of the milk-weed, which grows wild all over the country, it is said will effectually remove warts if applied to them every morning and evening for ten days or a fortnight. Break the stem of the weed in two and let the milky juice drop upon the wart.

Felons.—The instant a felon (it is sometimes called a *run round*) makes its appearance upon the finger, soak the hand several times a day in hot lye---generally made of

hickory ashes. This will effect a cure, although the lye often makes the finger exceedingly painful for the time being. In case this does not relieve, the swollen part will have to be laid open by the knife.

Turning in of the Toe-nails.---The nail of the large toe, if not carefully attended to, will frequently grow into the flesh, and occasion much pain and temporary lameness. The nail should be carefully cut with a pair of scissors and then *scraped thin*, leaving the side edges rough; for they will not grow into the flesh except when they are pared smoothly.

A small tuft of lint may also be inserted under the nail as soon as it is raised up from the flesh.

To relieve Sickness of the Stomach.---A broad bandage bound tightly below the waist, will often prevent sickness at the stomach.

Half a glass of good cider in which a spoonful of ashes has been dissolved, will relieve sickness at the stomach.

Mint tea, made with the fresh leaves, is very powerful in allaying nausea and vomiting.

Inflammations.---Boil half a pound of lard, and cool it by pouring it suddenly into a pail of cold water. Repeat this four times; then chop three young onions very fine, simmer them for half an hour with the lard, strain the lard, and it will make a very cooling ointment, which can be applied to any inflamed part.

Warm vinegar and water used as a bath, are very efficacious in removing inflammation.

Gather the buds of the elderberry just before they blow, and boil them gently with as much fresh unsalted butter as will make a thick salve. This makes an excellent ointment for inflammatory sores.

Poultices.---A good poultice may be made of crumbs of bread boiled with milk, or sweet oil, or spring water.

Brown sugar and soap make a good poultice, or salve, for a boil.

Four ounces of white lily roots, a pound of figs, and four ounces of meal or bean flour, boiled together with as much water as will cover them, make an excellent poultice for swellings and suppurating sores.

A good poultice for ordinary occasions, may be made of bread boiled in milk.

For cancers and running sores, a grated carrot boiled quite soft makes a good poultice.

Salad leaves well boiled, make a poultice that relieves acute pain.

A poultice of flax-seed, or chamomile flowers boiled with the tops of wormwood, make an excellent poultice for inflammations.

A *Sinapism*, or stimulating poultice, is made by using vinegar instead of water, and the addition of garlic, mustard, horseradish, &c., to crumbs of bread, or to flour.

To prepare Castor Oil for Children.—Pour a little more than the necessary quantity of the oil in a long bottle, and add to it a couple of teaspoonfuls of thin currant jelly; shake the bottle hard until the jelly and oil are well mingled together and form a froth. Children will then find it palatable, and not suspect that it is medicine.

Another way of preparing castor oil is to boil it with milk, stirring it well, sweeten it, and give it to the child to drink when it becomes cold. It will not be found disagreeable to the taste.

Molasses.—Molasses and water is an excellent cathartic for children. The West India molasses should be used for this purpose, as the sugar-house molasses acts as an astringent.

CHAPTER VII.

ACCIDENTS AND ANTIDOTES.

Burns.—If the burn is bad the injured part must be kept from the air. Pour some sweet oil upon cotton wool and bind up the part.

Linseed oil and lime water may be applied with benefit to a burn, either spread on cotton or a piece of fine linen.

The inside of a potatoe finely scraped and applied to the affected part, will instantly relieve a burn.

House-leek juice mixed with cream, will often relieve the pain of a burn.

Spirits of turpentine mixed with sweet oil, applied to a burn, will soon remove the pain where the skin is unbroken.

Should the blisters raised by a burn break, sprinkle a little wheat flour upon the part.

In uncovering a scalded part, we must cautiously avoid breaking the skin: with this view it will always be expedient to cut off the clothes in contact with the injured surface. In some cases it is best to allow the clothes to remain untouched, until the inflammation has to a certain extent been subdued.

Should the skin be destroyed, the part should be covered with pure soft linen, or blotting paper, smeared with animent of sweet oil and lime water, to which may be added a few drops of laudanum.

When an artery is cut it will be known by the spirting out of the blood at regular intervals, at each beat of the heart. The artery in many cases has to be tied; but as an unprofessional person cannot do this, a firm compress made of several folds of linen cloth should be laid

over the wound and a bandage tightly bound upon it; medical aid should then immediately be resorted to. In addition to this, a ribbon, cord, or pocket handkerchief, should be tied firmly around the limb, between the wound and the heart; and to keep the bandage tight, a stick may be inserted inside of it and twisted.

Sprains.—Dissolve a lump of camphor half the size of a hen's egg in a couple of wineglasses of spirits of wine, add to this ten drops of laudanum, and bathe the sprained part.

If the sprain is slight foment it in warm vinegar and water.

An ounce of camphor dissolved in half a pint of spirits of turpentine will sometimes relieve a sprain.

Entire rest is necessary for the sprained limb.

Bruises.—Bathe the bruise in porter which has been boiled until it is quite thick; bind up the part with linen, and when the linen dries bathe the bruise again. The porter must not be used until it is cold.

Bathe a bruise in warm brandy or whiskey, and if neither can be procured, in warm water. A wash of sugar of lead, one drachm to the pint, is useful in these cases.

Choking.—The life of a person who is choking is often saved by the presence of mind and dexterity of the persons who happen to be about him.

When a substance is lodged at the top of the gullet, it can be extracted with the finger, or a pair of pincers, drawing the tongue forward at the same moment with the other hand, which should be covered with a rough glove or towel, to prevent the tongue slipping through the fingers. If the substance however is lower down, it must either be brought upwards, or pushed into the stomach by other means, such as a piece of whalebone, covered with a bit of sponge.

Should the substance swallowed be copper or lead, all

acids must be cautiously avoided ; and in order to counteract the effects of any that might be generated in the stomach, it will be proper to administer a small tea-spoonful of magnesia, or chalk, every five or six hours, until the substance has passed out of the body. If it is likely to irritate or lacerate the coat of the stomach, bread and milk pudding, and other such substances should be given, in order to envelop it, and thus to conduct it through the bowels in safety.

Suffocation.—Cold water should be dashed over the body and particularly the chest of a person who is suffocating, and he should be instantly carried into the fresh air. Dry off the water and sponge the body with vinegar.

As soon as the person can swallow, lemonade is the best beverage that can be given.

When the patient recovers he should not be placed in a *warm* bed, nor should tobacco be used in any manner, nor should emetics be given. The application of these remedies is a common error.

When the suffocation proceeds from the person's having inhaled the fumes of charcoal, &c., the directions given above should be strictly followed. The person should be kept lying upon the back, and the head *very slightly* elevated above the feet.

Blow on the Head.—When the head has received so much a blow as to cause insensibility, apply a mustard plaster to the back of the neck and pit of the stomach, and

prevent from sleeping
the hand ap-
the

same instant, his only chance is to throw himself upon his back, and to make a similar effort with both at once.

Bleeding at the Lungs.---A tea-spoonful of dry salt given at short intervals will stop profuse bleeding at the lungs.

The herb called golden-rod dried and made into a tea, will have the same effect. A tumblerful should be taken every half hour. This remedy has been found very efficacious.

Bleeding at the Nose.---If the bleeding is slight, place the patient in a *sitting* or *erect* posture, with the head gently reclined backwards in the cool air. The bleeding may be stopped by pouring cold water on the back of the neck, or applying to it cloths dipped in vinegar and water, or saltpetre and water. If the bleeding is violent, the nostrils should be plugged with lint dipped in strong vinegar. The patient should not be permitted to sleep with the plugs in the nostrils, or the blood might in consequence pass into the throat, and suffocate him. Bleeding from the nose may generally be stopped by smearing the forehead with blood and letting it dry on.

Frozen.---After the body has been frozen it should be warmed *very gradually*, or life will be inevitably lost; if it be incautiously placed before a fire, or be plunged in warm water, or even laid in warm blankets, the consequences may be fatal.

The body should be placed in a large room *without a fire*, and moderate friction diligently applied.

If the body is stiff immerse it in cool water up to the neck, and rub it until it becomes supple. Then place it between blankets and rub it with warm hands.

Frost Bitten.---A frost-bitten part appears dead, and it should not, on any account, be brought near the fire, nor should the patient remain in a warm room. The affected part should be immediately rubbed with snow or plunged

in ice-water. Should the pain commonly called the *hot-ache* be urgent, as the limb recovers, cold must again be resorted to.

The healthy action being restored, the parts are to be well guarded against the cold. And the person should not take *strong drink*, or eat animal food for a few days. The principle of the cure is in the moderate application of heat, not in the application of cold.

Lightning.---Place the person who has been struck, in an erect posture, and dash two or three pailfuls of cold water over the head. The body should be thoroughly dried and well rubbed. Mustard poultice should then be applied to the stomach.

If the body is *cold*, the cold water, as above directed, is not to be dashed over it. Attempt to restore the natural temperature by friction and bladders of hot water placed at the soles of the feet, on the stomach, and beneath the armpits.

Stroke of the Sun.---A person who has been long exposed to the meridian rays of a summer sun, and falls down suddenly, deprived of sense and motion, is said to have received a *stroke of the sun*. In carrying him to the house his head should not be permitted to hang down, or lie upon his breast. He should be placed in an airy chamber, the doors and windows open. Cloths soaked with cold vinegar and water are to be applied to the head, and changed as often as they become warm, and a mustard poultice placed upon the upper part of the foot and instep. An emetic should not be given, neither should snuff or smelling bottles be applied to the nostrils. Give the patient no animal food nor spirits, and the return to their use should be cautious and gradual.

Hanging.---If the body is suspended much above the surface of the ground, it should be lifted up while the cord is cut.

Friction is to be gently applied to the chest, belly, and

sides of the neck, either by the hand alone, or with flannel dipped in a mixture of turpentine, or hartshorn with oil, or in camphorated liniment, or any spirits and oil. The lungs should then be inflated by applying a bellows to one nostril while the other is kept closed with the finger. The same means of restoring respiration may be used as in cases of *drowning*. See page 27.

Fainting Fit.---Loosen the clothes of the person who has fainted, place him in the fresh air, and sprinkle cold water upon the face. A person in a fainting fit should always be laid upon his back, with the head on a level with the feet.

Chafe the palms of the hands and temples with the hand, and apply hartshorn to the nostrils.

Stoppage of the Urine.---This is in many instances a dangerous complaint, and a medical person should be sent for without delay.

If it occurs from the injurious habit of retaining the urine too long, or indeed, from any other cause, a warm hip bath should be instantly used.

Injuries of the Ear.---It sometimes happens that children push fruit-stones, peas, and other hard bodies into their ears, or that insects creep into them; such extraneous substances must be extracted as soon as possible, or they may induce very serious consequences.

Peas or fruit-stones should be extracted with a pincers or forceps, great care being taken that the ear is not injured by the instrument.

If insects have entered the ear, pour in oil mixed with a few drops of laudanum, and they will immediately be destroyed.

Bite of a Mad Dog.---The bitten part must be instantly *uncovered*, in order that the saliva, caught by the clothes, may not come in contact with the abraded part. The wound should be sucked freely with the mouth.

If it is superficial, and upon one of the limbs, apply a ligature, moderately tight, above and below it, which should be continued until the bitten part is well cleansed.

Wash the wound in salt and water, or with soap, or hartshorn.

The wounded part should be instantly cut out, but if the patient will not submit to such an operation, the lacerated and jagged wound *must* be freely cut open to the bottom with a knife, and bleeding encouraged by the use of warm water. Caustic should be applied to the wound when the bleeding ceases; the wound should then be filled with cotton, and a large poultice kept over the whole for three or four days, in order to lessen the inflammation; the following dressing will then be advantageous. Take of the oil and the spirits of turpentine, each one table-spoonful, and rub them together with the yolk of an egg; by these means the wound must be kept open for at least a fortnight.

Bite of the Adder or Viper.—If the bites are superficial, the swelling trifling, and the patient free from any violent pains at the pit of the stomach, it will be sufficient to apply spirits of hartshorn or *eau de luce* to the bite, by dipping a piece of pointed stick into the liquid and then introducing it into the punctures made by the fangs. If the wounds are deep and narrow they must be enlarged. After this a common bread poultice may be applied.

If the wound is severe use *aqua fortis*, *spirits of sea salt*, or *oil of vitriol*, instead of hartshorn.

It is a good plan to *suck out* the venom as soon as the bite is given, but the mouth should afterwards be well rinsed.

Bite of a Rattlesnake.—The bite should be instantly sucked, and this is the best method of extracting the venom. The flesh should then be cut round and made to bleed freely. When the bleeding ceases, caustic should be applied, but if an interval must elapse before the caus-

tic can be procured, fill the wound with fine table salt. Bathe the limb in salt and vinegar; and that the stomach may not be affected, swallow a tea-spoonful of sweet oil mixed with ten drops of turpentine. No dependence can be placed on any of the plants which have been recommended in these cases.

Sting of a Bee.—Apply a salve of hartshorn and chalk to the sting, removing it frequently, and it will give almost instant relief.

Table salt moistened with water will relieve the pain incident upon the sting of a bee.

Sting of a Wasp.—Wet mud or hartshorn applied frequently to the part which has been stung, will remove the pain which proceeds from the sting of a wasp.

Sting of a Hornet.—This sting is generally very bad. The sting should be immediately extracted with a needle, but before the attempt is made, let the *projecting portion*, which contains the poison bag, be cut off with a pair of scissors, or in the attempt to extract it more poison may be forced into the puncture. After this, if the pain is severe, apply a couple of leeches to the part and make a poultice of a handful of poppy-heads, boiled in half a pint of water and beaten into a mass. This poultice may be kept on all night.

Bite of a Spider.—Apply a bread and milk poultice with the addition of twenty drops of laudanum.

If the bite is very severe, leeches should be applied.

Poison from Corrosive Sublimate, Arsenic, and Verdigris.—When a person has swallowed any of these substances, lose not a moment in your attempt to excite vomiting. Mix up the whites of twelve eggs in two quarts of water, and give a tumblerful every five minutes until the person vomits. Continue this treatment after the vomiting has commenced.

As an antidote for arsenic, send immediately and procure four ounces of the *hydrated peroxide of iron*, at the druggists, mix it in a pint of soft water, and give a wine-glassful, (shaking it up,) every ten minutes. This is now considered as a certain antidote for this poison, and none other can be relied on. An ounce of castor oil should be given after three or four hours, followed by a large injection of tepid water.

Poison from Lunar Caustic.—The patient should drink every two minutes a glass of common salt and water, made in the proportion of a table-spoonful of salt to two pints of water : by this expedient vomiting will be produced, and the poison at the same time disarmed of its virulence by decomposition.

Poison from Sugar of Lead. The patient should take a solution of *epsom* or *glauber salts*, prepared by dissolving two table-spoonfuls of the salt in a pint of water. When the poisonous contents of the stomach are discharged, linseed tea may be given, or any mild drink.

Poison from Spanish Flies.—The patient should immediately take two or three table-spoonfuls of sweet oil, and repeat the same every two or three minutes, to produce vomiting, and at the same time to sheath the coats of the stomach; when the oil is not at hand, fresh butter, or melted suet, cream, milk, or linseed tea, must be largely and repeatedly drank.

Poison from Oil of Vitriol, Aqua-Fortis, Spirits of Sea Salt, Acid of Sugar, or Sea Sorel.—Unless the most prompt and active measures be taken when any of these substances have been swallowed, there is but little chance of recovery.

The patient should instantly swallow a large quantity of milk : in the meantime, in order to neutralise the acid and produce vomiting, prepare a drink of water mixed with *calcined* magnesia, in the proportion of two table-

spoonfuls to a pint. A glass of this should be taken every two minutes. This is the most efficacious remedy that can be applied. But if magnesia cannot be instantly procured, use chalk, soap and water, or any alkaline substance that can be procured, avoiding what are called *carbonates* if possible.

Poison from Tartar of Antimony---Tartar Emetic.--- Should vomiting not take place spontaneously, it must be excited by drinking largely of sugared water, linseed tea, gruel, or even pure water. If this should fail, boil four or five pounded *gall nuts* for ten minutes in a quart of water, and take a wine-glass full of the water every five minutes.

Should the vomiting be too severe it must be quieted by laudanum, administered in doses of from five to thirty drops, according to the age of the patient.

No ordinary emetic, such as *ipecacuanha*, should be given.

Poison from Laudanum, Henbane, Hemlock, Laurel Water, Fox Glove, Tobacco, Nightshade.--- Produce vomiting as soon as possible. To this end administer three or four grains of *tartar emetic* dissolved in warm water; or three grains of *white vitriol*, or from four to eight grains of *blue vitriol*, or thirty grains of *ipecacuanha*.

If the patient has lost the power of swallowing, a strong mustard plaster should be applied to the stomach and throat.

Never give the patient brandy or vinegar; such a practice is attended with the greatest danger.

Prevent the person from falling asleep by every means which ingenuity can invent. When the poison has been thrown off from the stomach, then, *and not till then*, give, every few minutes, a glassful of hot coffee.

If *tobacco*, *fox-glove*, or *laurel-water* have been taken, a glass of strong punch or wine should be given as soon as vomiting has ceased, or ten drops of spirits of hartshorn in water.

Poison from Mushrooms.—Neither vinegar, brandy, nor salt are to be given, as they dissolve the poisonous qualities of the mushrooms, and consequently increase their destructive effects.

An emetic is instantly to be administered, and vomiting encouraged. The stomach should be fomented with warm water and brandy.

When the vomiting ceases administer two table-spoonfuls of castor oil, beat up with the yolk of an egg and given in two doses. In all cases of narcotic poisoning, mustard applications externally are never to be omitted.

To Prevent Infection.—Chloride of Lime.—This preventive of contagion may be prepared for use as follows :—stir one pound of the chloride of lime into four gallons of water ; allow it to settle for a short time, pour off the clear solution, and keep it in well corked bottles.

In houses infected, sprinkle the rooms morning and evening with the above mixture ; and place some of it in shallow dishes or basins. Sprinkle the bed linen occasionally, and admit fresh air. Infected linen should be dipped in the mixture about five minutes, and then in common water, before it is sent to the wash. A wine-glassful added to the water of a night-chair or bed-pan, will prevent any smell. To destroy the effluvia from drains, sewers, cesspools, &c., pour into them a quart of the mixture, with a pail of water.

CHAPTER VIII.

GENERAL RULES FOR PRESERVING LIFE AND HEALTH.

Sir R. Philips's Rules.—"1. Rise early, and never sit up late.

2. Wash the whole body every morning with cold water by means of a large sponge, and rub it dry with a rough towel, or scrub the whole body for ten or fifteen minutes with flesh brushes.

3. Drink water generally, and avoid excess of spirits, wine, and fermented liquors.

4. Keep the body open by the free use of the syringe, and remove superior obstructions by aperient pills.

5. Sleep in a room which has free access to the open air.

6. Keep the head cool by washing it when necessary with cold water, and abate feverish and inflammatory symptoms when they arise by persevering stillness.

7. Correct symptoms of plethora and indigestion by eating and drinking less per diem for a few days.

8. Never eat a hearty supper, especially of animal food; and drink wine, spirits, and beer, if these are necessary, only after dinner.

Dr. Boerhaave's Rules.—This great man left, as a legacy to the world, the following simple and unerring directions for preserving health; they contained the sum and substance of his vast professional knowledge, during a long and useful life:—"Keep the feet warm; the head cool; and the body open."—If these were generally attended to, the physician's aid would seldom be required.

Clothing.—To adapt the dress to a scrupulous nicety to the fluctuations of temperature every day, would indeed require such minute attention as hardly any person

can bestow : but every person may comply with the general rules of clothing, as far as not to lay aside too early the dress of the winter, nor to retain that of the summer too late ; from a neglect of which precaution thousands of lives are every year sacrificed to mortality. The perfection of dress, considered merely as such, is to fit without fettering the body.

Air.—Nothing is more pernicious than the air of a place where a numerous body of people are collected together within doors ; especially if to the breath of the crowd there be added the vapours of a multitude of candles, and the consumption of the vital air by fires in proportion. Hence it happens, that persons of a delicate constitution are liable to become sick or faint in a place of this kind. These ought to avoid, as much as possible, the air of great towns ; which is also peculiarly hurtful to the asthmatic and consumptive, as it is likewise to hysteric women, and men of weak nerves. Where such people cannot always live without the verge of great towns, they ought, at least, to go out as often as they can into the open air, and, if possible, pass the night in the wholesome situation of the suburbs.

Ventilation.—Air that has long stagnated becomes extremely unwholesome to breathe, and often immediately fatal. Such is that of mines, wells, cellars, &c. People ought therefore to be very cautious in entering places of this description which have been long shut up. The air of some hospitals, jails, ships, &c. partakes of the same unwholesome and pernicious nature ; and they ought never to be destitute of ventilators—those useful contrivances for expelling foul, and introducing fresh air into its place. The same may be said of all places where numbers of people are crowded together.

It is found that most plants have the property of correcting bad air within a few hours, when they are exposed to the light of the sun ; but that, on the contrary, during the night, or in the shade, they corrupt the common

air of the atmosphere. Hence it is a dangerous practice to have shrubs in an apartment that is slept in.

Ventilation of Churches.—Both in public and private buildings there are errors committed, which affect in an extraordinary degree the salubrity of the air. Churches are seldom opened above once a week; they are never ventilated by fires, and rarely by opening the windows: while, to render the air of them yet more unwholesome, little or no attention is paid to keeping them clean. The consequence of which is, that they are damp, musty, and apt to prove hurtful to people of weak constitutions; and it is a common remark, that a person cannot pass through a large church or cathedral, even in summer, without a strong sense of coolness.

Ventilation of Houses.—The great attention paid to making houses close and warm, though apparently well adapted to the comfort of the inhabitants, is by no means favourable to the health, unless care be taken every day to admit fresh air by the windows. Sometimes it may be proper to make use of what is called pumping the room, or moving the door backward and forward for some minutes together. The practice of making the beds early in the day, however in many suit convenience or delicacy, is doubtless improper. It would be much better to turn them down, and expose them to the influence of the air admitted by the windows.

For many persons to sleep in one room, as in the ward of a hospital, is very hurtful to health; and it is scarcely a less injurious custom, though often practised by those who have splendid houses, for two or more to sleep in a small apartment, especially if it be very close.

Houses situated in low marshy countries, or near lakes of stagnating water, are likewise unwholesome; as they partake of the putrid vapours exhaled in such places. To remedy this evil, those who inhabit them, if they study their health, ought to use a more generous diet than is requisite in more dry and elevated situations.

Caution to Glaziers, Painters, and Plumbers.—The following medical cautions were recommended by the physicians and surgeons of the Bath Hospital, to those who have received benefit by the use of the Bath waters, in cases where the poison of lead is concerned, as plumbers, glaziers, painters, and other artificers, who work in trades which expose them to similar hazards, from the same cause ; to be observed by them at their return to the exercise of their former occupation.

1. To maintain the strictest temperance, particularly respecting distilled spirits, which had better be altogether forborne.

2. To pay the strictest attention to cleanliness, and never suffer paint to stick about or to daub their hands : and particularly never to eat their meals, or go to rest, without washing their hands and face with soap, perfectly clean.

3. Not to eat or drink in the room or place wherein they work ; and much less to suffer any food or drink to remain unused, even for the shortest space of time, in any part of the room while painting, or where colour stands ; and not to work on an empty stomach.

4. As the clothes of persons in this line (painters, particularly) are generally much soiled with colour, it is recommended for them to perform their works in frocks of ticking, which may be frequently washed, and conveniently laid aside when the workmen go to their meals, and again put on when they resume their work.

5. Every business which can, in these branches, should be performed with gloves on their hands ; painters, in performing clean light work, would find gloves an inconvenience ; but to avoid the evil here mentioned, the handle of the brush should be often scraped. Woollen or worsted gloves are recommended, as they may, and should be often washed, after being soiled with the paint, or even with much rubbing against the metal.

6. Caution is necessary in mixing, or even in unpacking, the dry colours, that the fine powder do not get into their mouths, or be drawn in by the breath. A crape

covering over the face might be of service ; but care should be taken to turn always the same side of the crape towards the face, and to clean or wash it frequently.

7. All artificers should avoid touching lead when hot ; and this caution is especially necessary for printers or compositors, who have often lost the use of their limbs by handling the types, when drying by the fire after being washed.

8. Glazier's putty should never be made or moulded by the hand. An iron pestle and mortar would work the ingredients together, at least equally as well, and without hazard. It is necessary in working putty to handle it, nor is it usually pernicious ; cleanliness is therefore the best recommendation.

9. If persons in any of the above employments, should feel pain in the bowels, with costiveness, they should immediately take twenty drops of laudanum, and when the pain is abated, two table-spoonfuls of castor oil, or an ounce of the bitter purging salt, dissolved in warm chamomile tea. If this does not succeed, a pint, or two pints of warm soap-suds, should be thrown up as a clyster.

10. As a preventive, two or three spoonfuls of salad oil, taken in a small cup of gruel, is likely to be of service, if taken daily, and steadily pursued.

To protect Gilders, Jewellers, and others from the pernicious effects of Charcoal.—It is advisable for all those who are exposed to the vapours of charcoal, particularly gilders, jewellers, refiners of metals, &c. to place a flat vessel, filled with lime water, near the stove in which the charcoal is burnt.

The lime strongly attracts the mephitic gas evolved by the ignited charcoal, and preserves the purity of the air. When the surface of the water becomes covered with a film, or pellicle, it must be changed for a fresh quantity.

To prevent Lamps from proving pernicious to Asthmatic persons.—The smoking of lamps is frequently dis-

regarded in domestic life ; but the fumes arising from oil, especially if it be tainted or rancid, are highly pernicious, when inhaled into the lungs of asthmatic persons. To prevent this, let a sponge, three or four inches in diameter, be moistened with pure water, and in that state be suspended by a string or wire, exactly over the flame of the lamp, at the distance of a few inches ; this substance will absorb all the smoke emitted during the evening or night, after which it should be rinsed in warm water, by which means it will be again rendered fit for use.

Riding and Walking.—For preserving health, there is no kind of exercise more proper than walking, as it gives the most general action to the muscles of the body ; but, for valetudinarians, riding on horseback is preferable. It is almost incredible how much the constitution may be strengthened by this exercise, when continued for a considerable time ; not so much in the fashionable way of a morning ride, but of making long journeys, in which there is the farther advantage of a perpetual change of air. Numbers of people, reduced to a state of great weakness, have, by this means, acquired a degree of vigour and health, which all the medical prescriptions in the world could not otherwise have procured. But, it is of importance, in travelling for health, that one should not employ his mind in deep reflections, but enjoy the company of an agreeable companion, and gratify his sight with the prospect of the various objects around him. In this exercise, as well as every other, we ought always to begin gently, and finish gradually, never abruptly.

Exercise after Meals.—Exercise is hurtful immediately after meals, particularly to those of nervous and irritable constitutions, who are thence liable to heart-burn, eructations, and vomiting. Indeed, the instinct of the inferior animals confirms the propriety of this rule ; for they are all inclined to indulge themselves in rest after food. At all events, fatiguing exercise should be delayed till digestion is performed, which generally requires three or four hours after eating a full meal.

Reading Aloud.—This is a species of exercise much recommended by the ancient physicians; and to this may be joined that of speaking. They are both of great advantage to those who have not sufficient leisure or opportunities for other kinds of exercise. To speak very loud, however, or exercise the voice immediately after meals, is hurtful to the lungs, as well as to the organs of digestion. Singing, as by the vibratory motion of the air it shakes the lungs and bowels of the abdomen or belly, promotes, in a remarkable degree, the circulation of the blood. Hence, those sedentary artificers or mechanics, who, from habit, almost constantly sing at their work, unintentionally contribute much to the preservation of their health.

Wind Instruments.—All these are more or less hurtful to the lungs, which they weaken by introducing too much air, and keeping that organ too long in a state of distension. On this account persons of weak lungs, who play much on the flute, hautboy, or French horn, are frequently afflicted with spitting of blood, cough, shortness of breath, and pulmonary consumption. Blowing these instruments likewise checks the circulation of the blood through the lungs, accumulates it towards the head, and disposes such persons to apoplexy.

Friction.—One of the most gentle and useful kinds of exercise, is friction of the body, either by the naked hand, a piece of flannel, or what is still better, a flesh brush. This was in great esteem among the ancients, and is so at present in the East Indies. The whole body may be subjected to this mild operation, but chiefly the belly, the spine, or back-bone, and the arms and legs. Friction clears the skin, resolves stagnating humours, promotes perspiration, strengthens the fibres, and increases the warmth and energy of the whole body. In rheumatism, gout, palsy, and green sickness, it is an excellent remedy. To the sedentary, the hypochondriac, and persons troubled with indigestion, who have not leisure to take sufficient

exercise, the daily friction of the belly, in particular, cannot be too much recommended as a substitute for other means, in order to dissolve the thick humours which may be forming in the bowels, by stagnation, and to strengthen the vessels. But, in rubbing the belly, the operation ought to be performed in a circular direction, as being most favourable to the course of the intestines, and their natural action. It should be performed in the morning, on an empty stomach, or, rather, in bed, before getting up, and continued, at least, for some minutes at a time.

Getting Wet.—This accident is at all times less frequent in towns than in the country, especially since the use of the umbrella has been introduced.

When a person is wet he ought never to stand, but to continue in motion till he arrives at a place where he may be suitably accommodated. Here he should strip off his wet clothes, to be changed for such as are dry, and have those parts of his body which have been wetted, well rubbed with a dry cloth. The legs, shoulders, and arms, are generally the parts most exposed to wet: they should, therefore, be particularly attended to. It is almost incredible how many diseases may be prevented by adopting this course. Catarrhs, inflammations, rheumatisms, diarrhœas, fevers, and consumptions, are the foremost among the train which frequently follow an accident of this kind.

Precautions in removing from a hot to a cold situation.—It should be a determined rule to avoid all rapid transitions from one extreme to the other, and never to remove from a room highly heated, to a fresh or cold air, while the body remains warm, or till the necessary change to a warmer dress has been previously made. If, at any time, the body should be violently heated during the warm weather, it is sure to suffer by going into vaults, cellars, ice-houses, by cold bathing, or by sitting on cold stones, or damp earth: many lingering and incurable maladies have been brought on by such imprudence; nay, present death has, in some instances, been the conse-

quence of such transgression. Pulmonary consumption, which annually makes such dreadful ravages among the young and middle aged, has been frequently induced by such apparently trifling causes.

To keep the Feet Dry.—The only method that has been found to succeed in keeping the feet dry, is to wear, over the foot of the stocking, a sock made of oiled silk. To keep it in its proper place, it will be necessary to wear over it a cotton or worsted sock. The general health being often disturbed by wet feet, the above directions ought to be carefully attended to.

To preserve the Eye-sight.—Never sit for any length of time in absolute gloom, or exposed to a blaze of light. The reason on which this rule is founded, proves the impropriety of going hastily from one extreme to the other, whether of darkness or of light, and shows us that a southern aspect is improper for those whose sight is weak and tender.

2. Avoid reading small print, and straining the eyes by looking at minute objects.

3. Do not read in the dusk, nor, if the eyes be disordered, by candle-light.

4. Do not permit the eyes to dwell on glaring objects, more particularly on first waking in the morning; the sun should not of course be suffered to shine in the room at that time, and a moderate quantity of light, only, should be admitted. For the same reasons, the furniture, walls, and other objects of a bed-room, should not be altogether of a white or glaring colour; indeed, those whose eyes are weak, would find considerable advantage in having green for the furniture, and prevailing colour, of their bed-chambers. Nature confirms the propriety of this fact, for the light of the day comes on by slow degrees, and green is the universal colour she presents to our eyes.

5. Those individuals who are rather long-sighted, should accustom themselves to read with less light, and

with the book somewhat nearer to the eye than what they naturally like ; while others, that are rather short sighted, should use themselves to read with the book as far off as possible. By these means, both will improve and strengthen their sight, while a contrary course increases its natural imperfections.

Use of Spectacles.—From whatever cause the decay of sight arises, an attentive consideration of the following rules will enable any one to judge for himself, when his eye-sight may be assisted or preserved by the use of proper glasses :

1. When we are obliged to remove small objects to a considerable distance from the eye in order to see them distinctly.

2. If we find it necessary to get more light than formerly, as, for instance, to place the candle between the eye and the object.

3. If, on looking at, and attentively considering a near object, it fatigues the eye and becomes confused, or if it appears to have a kind of dimness or mist before it.

4. When small printed letters are seen to run into each other, and hence, by looking steadfastly on them, appear double or treble.

5. If the eyes are so fatigued by a little exercise, that we are obliged to shut them from time to time, so as to relieve them by looking at different objects.

When all these circumstances concur, or any of them separately takes place, it will be necessary to seek assistance from glasses, which will ease the eyes, and in some degree check their tendency to become worse : whereas, if they be not assisted in time, the weakness will be considerably increased, and the eyes be impaired by the efforts they are compelled to exert.

Cosmetics.—To set off the complexion with all the advantage it can attain, nothing more is requisite than to wash the face with pure water ; or, if any thing farther be occasionally necessary, it is only the addition of a little soap.

The Teeth.—An object very subservient to health, and which merits due attention, is the preservation of the teeth; the care of which, considering their importance in preparing the food for digestion, is, in general, far from being sufficiently cultivated. Very few persons, comparatively, wash their mouths in the morning, which ought always to be done. Indeed, this ought to be practised at the conclusion of every meal, where either animal food or vegetables be eaten; for the former is apt to leave behind it a rancid acrimony, and the latter an acidity, both of them hurtful to the teeth. Washing the mouth frequently with cold water is not only serviceable in keeping the teeth clean, but in strengthening the gums, the firm adhesion of which to the teeth is of great importance in preserving them sound and secure.

Tooth Powders.—Many persons, while laudably attentive to preserve their teeth, do them hurt by too much officiousness. They daily apply to them some dentifrice powder, which they rub so hard as not only to injure the enamel by excessive friction, but to hurt the gums even more than by the abuse of the tooth-pick. The quality of some of the dentifrice powders, advertised in newspapers, is extremely suspicious; and there is reason to think that they are not altogether free from a corrosive ingredient. One of the safest and best compositions for the purpose is a mixture of two parts of scuttlefish bone, and one of the Peruvian bark, both finely powdered, which is calculated not only to clean the teeth, without hurting them, but to preserve the firmness of the gums.

Besides the advantage of sound teeth, for their use in mastication, a proper attention to their treatment conduces not a little to the sweetness of the breath. This is, indeed, often affected by other causes, existing in the lungs, the stomach, and sometimes even in the bowels; but a rotten state of the teeth, both from the putrid smell emitted by carious bones, and the impurities lodged in their cavities, never fails of aggravating an unpleasant breath wherever there is a tendency of that kind.

CHAPTER IX.

DIGESTION.

ACCORDING to the most recent experiments, digestion is accomplished by the agency of a fluid secreted by the stomach, and named gastric juice. Besides saline substances, mucus, &c., it always contains muriatic acid, and a greyish viscid extractive principle, named pepsin, which is believed to be the digestive agent; as out of the stomach, with the aid of a little muriatic acid and heat, it dissolves coagulated albumen, boiled meat, &c. Lactic acid is also a very general constituent; but both Dr. Prout and Professor Liebig consider it a product of unhealthy action in the stomach. The change which the food undergoes in the stomach is called chymification; and this process is accomplished very slowly, being dependent upon the powers of this organ, the degree of mastication or previous reduction of the aliments, and their quantity.

According to the experiments of Dr. Beaumont, there are three indispensable requisites for the proper completion of chymification. First, an adequate supply of gastric juice, and its thorough admixture with every particle of food; second, a temperature of 98° or 100° Fahr.; third, a gentle and continued agitation of the alimentary mass in the stomach. Liebig has shown, that digestion is in proportion to the quantity of oxygen consumed during respiration. Exercise quickens the breathing, and hence its utility in promoting chymification; and as more oxygen is consumed during winter than summer, from the greater density of the atmosphere in the former period, there is generally a better appetite and a greater quantity of food thoroughly digested. In ordinary cases, the gastric juice is diffused through the whole semi-fluid contents of the

stomach, and applied to the surface of each individual fragment of food. Liquid aliment is digested somewhat differently. The watery portion of it is very soon absorbed, thus leaving the semi-fluid parts to be converted into chyme. Milk and soups are exemplifications in which this process takes place; but the former is always more or less coagulated by the gastric juice. The chyme passes slowly from the stomach into the small intestine named the duodenum, and is there mixed with the bile and pancreatic fluid. By means of this mixture, probably assisted by the secretions from this part of the intestinal canal, the chyme is converted into chyle, a milky coloured fluid, considerably altered in its properties. The chyle is absorbed by the lacteals, where it is supposed to be vitalised, and conveyed by the thoracic duct into the veins; forming then a constituent part of the blood circulating through the system.

The comparative digestibility of different aliments, although a subject of great importance, has not hitherto been very accurately determined. The experiments of Dr. Beaumont, however, are more important than any previously performed. The case of St. Martin, who had an artificial opening in his stomach, furnished him with a very favourable opportunity of introducing aliments into this organ and afterwards withdrawing them; and making several other experiments connected with the process of chymification. At the same time, it may be remarked, that the stomach of St. Martin could not be considered at the time in an absolutely healthy state, from the injury it had sustained; and although he exhibited no particular symptom of dyspepsia, the conclusions drawn by Dr. Beaumont must be viewed only in the light of approximative truths. Fifty-one conclusions are drawn from his experiments, the most important of which are the following:

1. Arrow-root and other purely farinaceous substances are readily converted into chyme; while soup and green vegetables, such as cabbage, turnip, carrot, &c., are very slow in their assimilation.

Process of division and tenderness of fibres, are necessary for the digestion of flesh, fowl, and fish.

3. The quantity of food generally taken is more than the wants of the system require.

4. Bulk as well as nutriment is necessary to the articles of diet.

5. Oily food is difficult of digestion, though it contains a large proportion of the nutrient principle.

6. The time required for the digestion of food is various, depending upon its quantity and quality, &c.; but the period ordinarily required for the disposal of a moderate meal of the fibrous parts of meat with bread, &c., is from three to three and a half hours.

7. The gastric juice is capable of combining with a certain and fixed quantity of food; and when more aliment is presented for its action than it will dissolve, disturbance of the stomach or indigestion will ensue.

8. The motions of the stomach produce a constant churning of its contents, and admixture of food and gastric juice; from which is deduced the advantage of gentle exercise in promoting digestion.

CHAPTER X.

INDIGESTION.

As has been already noticed under Digestion, there is always muriatic acid present in the stomach during the process of chymification. In cases of indigestion, lactic acid, or the acid peculiar to milk, is also often formed in large quantities and sometimes with great rapidity. In confirmed cases of dyspepsia, the whole contents of the stomach sometimes become intensely acid in a short time, even in an hour, after taking an ordinary quantity of food. Dr. Prout is of opinion that the acid is most frequently secreted from the blood; but may also be derived from the food. That the aliment in the stomach contributes materially towards the production of lactic acid, is render-

ed very probable, by the fact of its more abundant formation from some kinds of food than from others ; even apparently under the same circumstances. Thus, green vegetables are more liable to generate acid than farinaceous or animal substances. The digestive process seems to be accompanied with one very similar to the lactic fermentation ; for much gaseous fluid is often evolved, and in general it will be found, that those alimentary substances which are most easily converted into lactic acid out of the body, by spontaneous decomposition or otherwise, are also the most ascendent in the stomach. In corroboration of this view, it may be stated as a result agreeable to the experience of those who have attended to this point, that when there is acid in a stomach, nearly empty, the next meal very speedily runs into the ascendent state. Liebig considers healthy digestion very much allied to fermentation or putrefaction. If this be a correct theory, the analogy between indigestion and those two processes must be still more intimate. The advantages of emetics and bitters in the cure of some forms of dyspepsia, may be thus partly accounted for. The first evacuate the acid ferment from the stomach ; the second check, to a certain extent, the process of fermentation. Although lactic acid be thus generated abundantly from the food in cases of indigestion, there can be little doubt that it is also formed by the stomach ; for when indigestible animal substances, such as bones, gristle, tendons, tough membrane, &c., are introduced into this organ, much acid is formed, even although little of the alimentary matters is dissolved. Besides these two sources of indigestion, it is highly probable that a third, although more rare variety, is accompanied with a modification of the putrefactive process. Oily and several animal substances are apt, in some individuals, to produce unhealthy digestion, accompanied with eructations resembling the odour of putrid or spoiled meat ; and both ancient and modern medical writers have attributed this to a putrefactive change in the alimentary substances. Dr James Johnson remarks, that “in these states of weak or impeded digestion, vegetable matter, wine, and even

spirits, soon degenerate into a strong acid ; while all oily substances become rancid, and animal matters putrid, producing sour and fetid eructations." The same author states that some instances have come under his notice, where the matters discharged from the stomach were extremely acrid and alkaline.

Dietetic Treatment of Indigestion.—In regulating the diet during the treatment of indigestion, the following principles may be deduced from the facts and experiments already noticed.

1. Every alimentary substance, before it is swallowed, ought to be minutely divided, or carefully masticated.

2. It ought to be tender in texture, or rendered so by the processes of cookery.

3. It should be little liable to run into ascendency, or the lactic fermentation.

4. It ought to contain little oil or fat. Dr. Beaumont is of opinion that the saliva has no solvent effect upon the food, and that it is merely intended to facilitate mastication. He has rendered this opinion very probable ; but whether it be true or not, the minute division and softening of the food by mastication is the most efficient method of effecting that end. Tenderness of texture is also a necessary quality of alimentary substances ; for when tough or hard, they cannot be softened or thoroughly divided by mastication. And even when their minute division has previously been accomplished, the evil is only lessened, not removed, for the central portions of the divided fragments are still hard, and remain long unchymified.

Among animals, the muscular fibre or flesh of the young is the most tender, such as veal and lamb, and according to this law ought to be more quickly digested than beef or mutton. The contrary, however, is asserted by many respectable writers ; but such has not been the result of my observation, when the cookery was simple and the quantity eaten moderate. It will often be found, upon careful inquiry, that when these articles of diet have been mentioned as the causes of indigestion, either too large a

quantity has been taken, or too much gravy, fat, membrane, or gelatinous accompaniment, has been swallowed along with it. And though animal substances are much less liable to generate lactic acid, in the stomach of a dyspeptic individual, than those of a vegetable kind, the gelatin of young animals frequently under such circumstances causes ascendency; and hence the muscular or fleshy parts should alone be used.

Fish is also condemned by some authors as liable to disagree with the dyspeptic. That this is the case with some of the oily fishes, such as the salmon, the family of herrings, the mackerel, and some others, there can be no doubt; but it is nearly as certain that many of the white fishes, namely, the whiting, haddock, cod, the common trout, &c. being tender but not gelatinous in the fibre, and containing little or no oily matter, are very readily digested. It is true that when taken with butter or other rich sauces, they often produce unpleasant feelings of indigestion; but it is by no means a legitimate conclusion to attribute this to the fish, when a well known indigestible article of diet is associated with it. When fish is taken by the dyspeptic, spices and salt, or a little ketchup, with or without mustard, are more suitable than oily condiments. In the vegetable kingdom the same rule with respect to texture will be found to hold, and it is well illustrated in the case of the potato. The raw or even the boiled *waxy* potatoe is digested with more difficulty than the *mealy* or farinaceous variety; chiefly because the latter is more easily broken down or disintegrated.

Cabbage, cauliflower, and other green vegetables, are hard in texture when raw or half-boiled, but by protracted exposure to heat, they become pulpy and easily diffused among watery fluids; independent of all changes which may be produced in the fermentable principles they contain. This is a great objection to the employment of green vegetables by dyspeptics, particularly as cooked in this country; but their tendency to run into ascendency is a greater one; and the two united are so formidable, as to render these articles totally inadmissible as diet for such persons.

Milk, although an animal fluid, often disagrees with those who have weak digestive organs, from its liability to run into the lactic fermentation, particularly during hot weather, when it is often slightly acid before it is used as food. For a simple reason, soups made with fermentable vegetables, fermented liquors, in which the process of fermentation is not finished, or where there exists some of the saccharine fermentable principle, are injurious; but a small quantity of sound and dry wine, that is, wine free from acid and thoroughly fermented, may be taken with impunity, particularly if diluted with water.

Potatoes, although an agreeable and almost indispensable vegetable, are also liable to excite acidity and flatulency. Those of a farinaceous quality should alone be employed by the dyspeptic; and if the indigestion be extreme, are to be avoided altogether. Fruits of all kinds, acid, sub-acid, saccharine, and oily, are calculated to generate lactic acid, and thereby derange the digestion; either directly by fermentation, or indirectly by becoming insoluble by the stomach. Of all the vegetable aliments the purely farinaceous and amylaceous, or starchy kinds, are the best adapted for the digestive organs of the dyspeptic; being rapidly chymified, having little tendency to produce acidity, and from their loose state of cohesion, being readily mixed with the gastric juice.

Bread, rice, the pea, sago, arrow-root, tapioca, and Irish moss, are familiar examples of this kind of alimentary matter.

In extreme cases of dyspepsia, even these, light and digestible as they are in general, sometimes occasion disagreeable feelings, which are often owing to the methods of cookery employed, particularly to the large addition of milk, sugar, or eggs. In such cases the article should be boiled with water, containing a little salt or sugar. It is much lighter when thus prepared, and may be used with *sound* milk or diluted sherry. In a few instances I have recommended, with advantage, weak brandy toddy. The finest quality of pease meal is well adapted for dyspeptics, and as it is agreeable and more nutritive than the purely

starchy aliments, may in many cases constitute a part of their diet. It ought to be prepared with a large quantity of boiling water, so that it may be thoroughly cooked, and have a thick consistency. Some of the farinaceous grains, from the large quantity of saccharine matter they contain, are liable to produce acidity. This is particularly the case with the oat, which is frequently employed in the preparation of a very agreeable gruel. Were it not for this objection, this grain is well adapted for the dyspeptic, as it is less constipating in its effects than several of the other species. Oatmeal may, to a considerable extent, be deprived of this injurious quality by maceration for a few hours in cold water, accompanied with occasional stirring. The preparation named *sowens* in Scotland, and *flummery* in some other parts of this country, is very similar to the article which would result from a prolonged maceration of oatmeal in water; and when well freed from the lactic acid which is generated, greatly resembles, in its properties, arrow-root, sago, and other amylaceous products. Sound and well fermented wheaten bread, if stale and slightly toasted, in general agrees well with those who have weak digestive organs; and is commonly their staple article of diet. But new bread is apt to excite acidity, and sometimes a feeling of weight in the region of the stomach, particularly when this process has not been completely extinguished by the heat of the oven. Stale bread possesses a certain degree of elasticity, and is easily broken down into fragments and disintegrated amongst water; whereas new bread does not acquire these properties thoroughly for twenty-four hours, and when masticated assumes to a certain extent the consistency of dough.

Under the primary deductions, fat or oily substances were enumerated as very indigestible. It has been the opinion of some authors, and is still believed by a small portion of the public, that the fat of quadrupeds is light and easily digested. This is contrary to the experiments of Dr. Beaumont, who found that pork, fat and lean, and suet with beef, required between five and six hours for chymification; and few decided dyspeptics who have once

dined heartily on fat pork or beef, will have any particular desire to repeat the experiment.

Dr. A. Combe, however, states that he has known very fat fried bacon digest with ease at breakfast; where even a small potato would have disordered the stomach. Besides this, there are other facts connected with the history of bacon, which illustrate its easy digestibility, in particular cases. A certain species of highly spiced bacon ham is said to have cured many persons of dyspepsia, when cut into very thin slices, fried, and taken for breakfast. Although it may readily be admitted that there are some individuals, with weak digestive organs, who can assimilate fat pork or bacon without much inconvenience: yet a more satisfactory explanation of the majority of the cases alluded to, may be given, upon the facts, that a small portion only of the article is swallowed; that it is highly spiced; that a stimulating empyreumatic oil is generated during the cookery, and that the latter, in conjunction with the spiceries, occasions the flow of a greater quantity of gastric juice.

I have thus entered pretty fully into details respecting the dietetic treatment of dyspepsia; but perhaps it may be useful to sum these up, by an example of the diurnal quantity of food that should be used, and the mode of its distribution into meals; for the test of satiety after slow eating, inculcated by many authors, is not to be relied on. It is by no means my intention to assert that the following is the best of all scales of diet for the decided dyspeptic; for many extreme cases occur, where nothing stronger than farinaceous or amylaceous substances can be digested, and there are others where the quantities here enumerated would be too small; but it is merely intended as a general or medium rule for those who have no precise guide for their appetites.

Breakfast may consist of eight or ten ounces of moderately strong tea or coffee, sweetened with a little refined sugar, and four or five ounces of bread slightly toasted. Dinner, in four or five hours afterwards, according to the exercise taken, may be composed of six or eight ounces of

boiled fish, with three or four ounces of bread; or four ounces of broiled mutton or beef, tender, and thoroughly cooked, may be substituted for the fish; or what will often be found more digestible, a slice of cold roast-beef. A glass of sherry diluted with six or eight ounces of water, or a dessert-spoonful of brandy, similarly diluted, may be used as drink; but more frequently pure water will be found the best of all diluents. Tea or coffee may be taken between three and four hours after dinner, for which there will be some appetite, if exercise has been employed in the interval; and it may consist of six or eight ounces of liquid, and three or four of bread. In this case no supper should be taken; but if it be preferred to tea, arrow-root, sago, or potato flour may be used, or toasted bread with a little weak negus or brandy toddy.

A summary of the whole treatment of indigestion may be included in the following points, namely: attention to the quantity and quality of the diet and drink; regularity of bowels, the regular employment of cold or tepid sponging, or bathing, accompanied with a residence in a healthy situation, where the air is uncontaminated, and where exercise proportioned to the vigour of the body may be employed. The medicinal portion of the treatment, although often highly useful in promoting the cure, and in relieving many immediate or remote painful sensations, may be characterised as only adjuvant or accessory; being quite inefficient without strict attention to regimen and dietetic rules.

CHAPTER XI.

ALIMENTARY PRINCIPLES OF THE VARIOUS KINDS OF FOOD.

ALIMENTS are derived either from the animal or vegetable kingdom. According to Professor Liebig, they consist, first, of nitrogenated substances, which contain nitrogen; and secondly, of non-nitrogenated substances, which do not contain this elementary body. The former, or those which contain nitrogen, are convertible into blood, and go to the formation of muscle and other organised tissues; the latter, or those which contain no nitrogen, to support the process of respiration. The nitrogenated aliments are vegetable fibrin, v. albumen, and v. casein, animal flesh, and animal blood. The non-nitrogenated aliments are fat or oil, starch, gum, sugar, pectin (vegetable jelly), gum, bassorine, wine, beer, and spirits. This author has found, that the nitrogenated constituents of vegetable food have a composition identical with that of the constituents of the blood. Hence he concludes that no nitrogenated compound, the composition of which differs from that of fibrin, albumen, and casein, is capable of supporting the vital processes in animals. Gelatin, a nitrogenated animal body, differs in composition from fibrin, albumen, and casein, the three primary nutritive principles of animal and vegetable substances; and on this account it is considered very unimportant as a nutritive agent. This theory is very ingenious and probably correct; and enables us to explain satisfactorily the well known fact, that animal flesh, fish, bread, &c., support the strength and vital processes much better, in similar proportions, than rice, arrow-root, sugar, &c. It must be allowed, however, that though there appears to be an intimate connection between the composition of the food and that of the organised tissues, which are nourished by it, yet, that

this alone will not, in every case, account for the superiority of one kind of aliment to another. Thus the flesh of animals has a similar composition to that of fishes; yet the first is generally admitted to be greatly superior in nutritive power to the second. No precise experiments, so far as I am aware, have been made to determine this point; but from the general experience of mankind, it may be deduced, that a diet of fish and vegetables is not capable of raising the system to the same strength and energy as a similar proportion of animal flesh and vegetable substances; whilst a purely vegetable diet, even of nitrogenated aliments, is inferior to both. Although this view appears to be correct, there is some difficulty in explaining it, but it may perhaps depend upon the arrangement of the particles in the flesh of quadrupeds being more like that in human structures, than in fishes and nitrogenated vegetables. According to Liebig, the non-nitrogenated substances, although not directly nutritive to the muscles and other similar organs, yet serve a very important purpose in supporting the functions of the animal economy. The process of respiration, in some respects, resembles combustion in a furnace; for thirteen or fourteen ounces of carbon are frequently consumed in the lungs, by an adult, every twenty-four hours; and animal heat is thus supposed to be generated. The carbon is supplied from our food, and it does not appear necessary that the latter should be nitrogenated, in as far as the process of respiration is concerned. This fact, amply corroborated by dietetic experience, shows that the larger proportion of our food may consist, with perfect safety, and most likely with advantage, of substances that contain no nitrogen. When the carbonaceous food is taken to a greater amount than is required to support respiration, &c., its constituents are deposited in the cellular texture in the form of fat; being in many cases a storehouse of combustible materials for any extraordinary demands of the animal system. Thus, during fevers and other acute diseases, accompanied with increased respiration, and where very little food is taken, the fat of the body disappears very

rapidly, and, as it contains a large proportion of carbon, it is well fitted to support the process of respiration. Again, it is known from experience, that oily and farinaceous substances, beer, wines, &c., which are rich in carbonaceous principles, tend to produce obesity in man, and to fatten the lower animals; while the milk of the mammiferous class, when fed with this aliment, furnishes a large proportion of butter. If active exercise be combined with this diet, the superfluous portion is consumed by the lungs, skin, &c.; for the carbonic acid given out by these two organs is then greatly increased. Hence, the fattening of the lower animals is most successfully conducted in confinement; as is usually practised with oxen. When the goose is fattened as a delicacy for the epicure, it is placed in a coop with its legs tied; and then its liver becomes double or treble the natural size, from the deposition of fat in its cells. M. Boussingault, and several other French philosophers, seem to consider substances destitute of nitrogen as of little value in supporting the animal economy. This opinion is not agreeable to theory, and is opposed by experience; for though it may be granted that the food of man must contain a certain proportion of nitrogen, yet the amount of carbon and nitrogen together ought to be considered the measure of the alimentary properties of different substances; as both of these elements are absolutely necessary for the support of important vital functions. It has been already mentioned, that Liebig considers gelatin as a very unimportant agent in the process of nutrition, and he does not stand alone in holding this opinion. Its nutritive properties have of late years occasioned much discussion among French chemists, particularly regarding the gelatin extracted from bones. Ten years ago a commission was appointed by the Institute of France, to inquire into this subject; but hitherto their conclusions have only tended to prove that gelatin exhibited *alone* is incapable of nourishing animals for any length of time. They have not, however, determined its alimentary power, when mixed with other kinds of food. The observations of M.

D'Arcet, have answered this to a certain extent. He shows, that in various hospitals in France, Holland, and Russia, the health of the inmates has been improved by using soup made from the gelatin and fat of bones, along with other alimentary substances. Indeed, the old experiments of Dr. Stark, the modern researches of M. Majendie, and the results above mentioned, all tend to prove, that alimentary principles exhibited *alone*, such as gelatin, albumen, sugar, and oil, with the exception of the gluten of wheat-flour, are not capable of nourishing animals for any length of time. Dr. Prout very justly considers milk, which is a natural product, as the prototype or model of an alimentary compound; as every kind of milk contains sugar, oil, and albumen. The food generally employed in Great Britain, and in several other countries, has more or less resemblance to this in its composition, as it consists of farinaceous substances, sugar, butter, vegetables, animal flesh, fish, &c. It may therefore be inferred with probability, that this kind of aliment is most conducive to health and vigour of body; but it is also well known that considerable deviations from it may be practised with impunity.

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